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HISTORY of WAR ANNUAL

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A fragment of a silver penny from the reign of Æthelstan. Some of his coins bore the legend 'Rex To Bri', which translates as 'king of all Britain'

ÆTHELSTAN

&

ENGLAND'S FIRST GREAT WAR

AN INTERVIEW WITH MICHAEL WOOD

Historian and broadcaster Michael Wood reveals how Alfred the Great's forgotten grandson became the first king of all England and won a hugely significant war to secure his fledgling realm

WORDS TOM GARNER

When King Æthelstan died in 939, an Irish chronicler hailed his legacy in mighty tones: "Æthelstan, king of the English died, the roof tree of the honour of the western world." This acclamation was remarkable for several reasons. First, many Irishmen had actually attempted – and failed – to topple the king in a devastating campaign in 937. Second, Æthelstan was recognised as 'king of the English' by his enemies, when only two generations previously the Anglo-Saxon people had faced complete annihilation. Third, the chronicler's praise was well founded: Æthelstan was indeed revered throughout Western Europe.

Æthelstan (popularly known to history as 'Athelstan') was the grandson of Alfred the Great, and from 924 to his death in 939 he unified the disparate Anglo-Saxons to create a truly unified kingdom of England for the first time. He was the eldest son of King Edward the

Elder, but his mother was a concubine, and his accession to 'king of the Anglo-Saxons' was by no means guaranteed. Nevertheless, once he gained power he fought relentless campaigns against his Viking and Celtic enemies within Britain and forced them all to submit to his overlordship in 927. He became 'Emperor of the world of Britain', and his rapid conquests bred great resentment among his enemies that culminated in a 'Great War' in 937.

Led by Anlaf Guthfrithson, the Viking king of Dublin and Constantine II, king of Scots, an unprecedented alliance of Vikings and Celtic peoples from across the British Isles invaded northern England and captured York. Although the details are uncertain, Æthelstan eventually raised an army and comprehensively defeated the invaders in what was described as an "immense, lamentable and horrible" battle at 'Brunanburh'. Although the location of this mysterious battlefield remains unknown, it was nevertheless decisive. The *Anglo-Saxon Chronicle* described how Æthelstan's warriors, "eager for glory, overcame the Britons and won a country." In other words, the new kingdom of England was secured.

Despite his importance to English and British history Æthelstan is a largely forgotten king in

the popular imagination. Now, 1,081 years after the warrior-king's great victory at Brunanburh, the historian, broadcaster and Anglo-Saxon expert Michael Wood reveals an England that was ravaged by decades of savage conflict and a monarch whose military achievements made him "renowned through the wide world."

"A SOCIETY GEARED TO WAR"

To what extent does Æthelstan bear comparison to his grandfather Alfred the Great and his other forebears in creating the kingdom of England?

I view it as a family project over three generations. The kingdom [of Wessex] was nearly overrun in 878 before the Battle of Edington and Alfred, from a very small base, created a 'kingdom of the Anglo-Saxons', which was a union of the Mercians and West Saxons.

Alfred's son Edward and daughter Æthelflæd then worked together in one of the greatest combined operations in the whole of Dark Ages warfare when they reduced the Danelaw up to the River Humber. Æthelstan must have fought in those wars from the age of 15 onwards, but we just don't know.

We know from the surviving fragments that he was trained as a warrior. One source says he was "invincible like a thunderbolt" so he probably had a lot of experience of war in all those battles in the East and West Midlands fighting the Vikings.



Left: Michael Wood is one of the most prominent experts on Æthelstan and has made documentaries about the king for the BBC, including episodes of 'In Search of the Dark Ages' and 'King Alfred and the Anglo-Saxons'

MIGHTY IN WAR... VICTORIOUS THROUGH GOD

King Æthelstan as he might have appeared at the height of his powers in the 930s. His appearance is based on a surprisingly rich blend of primary source descriptions, archaeological finds and even a portrait.

Chroniclers described the king as, "medium in height, slender in body, his hair flaxen," while his personality was "charming and well disposed to churchmen, affable and kind to laymen." He was known to be "audacious and forceful, much beloved by his subjects for his courage and humility and like a thunderbolt to rebels with his invincible steadfastness." It was said that Æthelstan could rule "by terror in his name alone."

Æthelstan's general appearance is based on a remarkable contemporary

portrait of him from a manuscript of the *Venerable Bede's Life of Saint Cuthbert*, which includes his face, a long green cloak and a simple crown. Additionally, parts of his accessories are speculatively based on earlier archaeological artefacts from the Anglo-Saxon period. These include the pommel of his sword, belt buckle and shoulder clasp, which are based on finds from the Staffordshire Hoard and excavations at Sutton Hoo.

What emerges is a multifaceted monarch who seemingly embodied all the key virtues required for Anglo-Saxon kingship – he was both pious and warlike. Consequently, Æthelstan is depicted holding both a sword and religious book of the period to emphasise his reputation for martial prowess, godliness and learning.



Æthelstan (left) presents a book to Saint Cuthbert, from an illustration of the *Venerable Bede's Life of Saint Cuthbert*. This rare image is the earliest surviving portrait of an English monarch

The British Isles as depicted in the Anglo-Saxon 'Cotton' world map. Created around 1025-50, this is the first relatively realistic depiction of Britain and Ireland





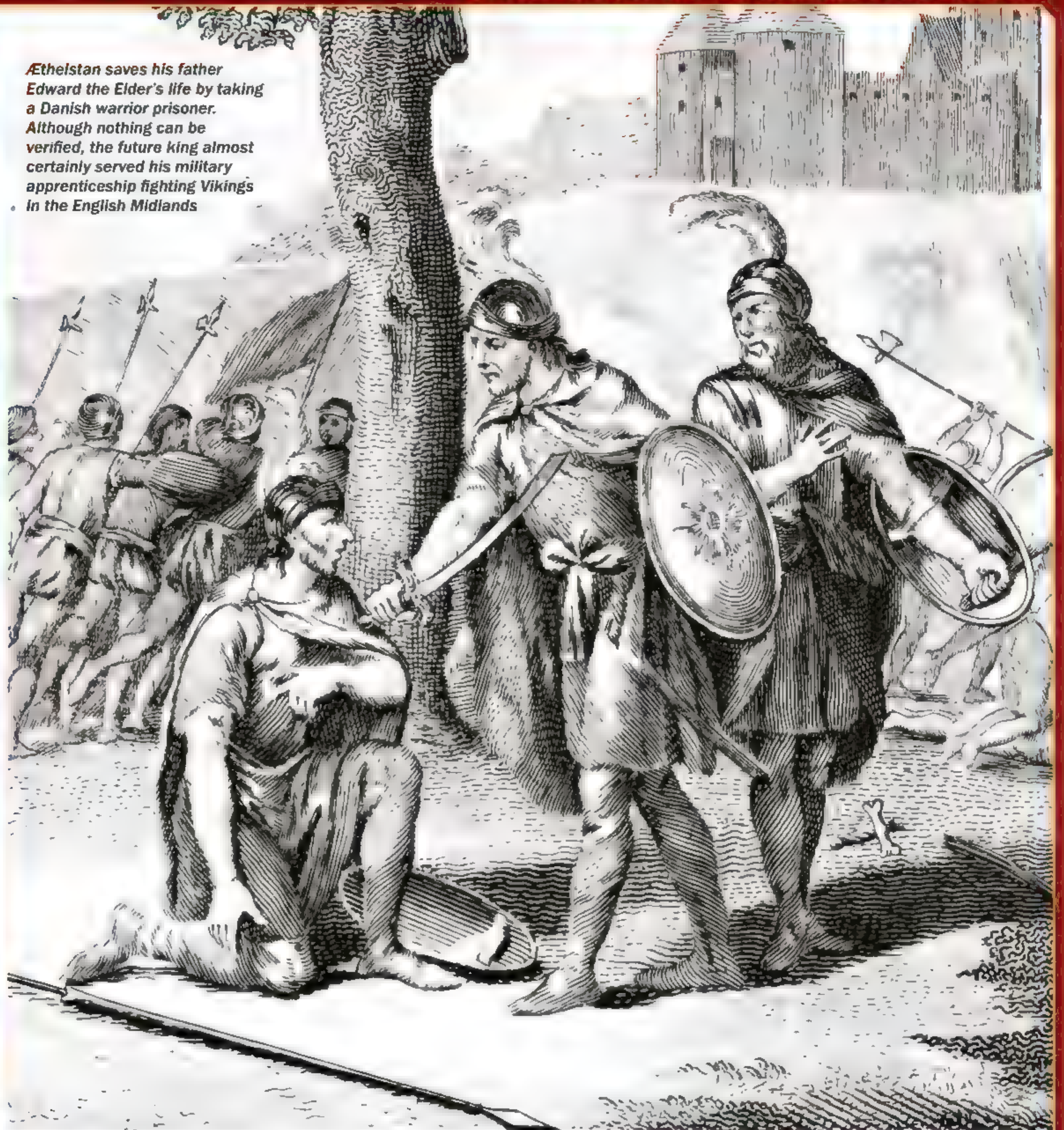
**"WHEN YOU COME INTO ÆTHELSTAN'S YOUTH
AND TEENS THERE ARE MAJOR BATTLES AND
DEVASTATION RIGHT DOWN THE COUNTRY SO IT
WAS A VERY, VERY UNSTABLE TIME"**

*A miniature of Saint Matthew in gospels
presented by Æthelstan to Christ Church Priory*

Æthelstan's grandfather Alfred the Great. Alfred once presented his young grandson with the regalia of kingship, including a royal cloak and a Saxon sword and belt



Æthelstan saves his father Edward the Elder's life by taking a Danish warrior prisoner. Although nothing can be verified, the future king almost certainly served his military apprenticeship fighting Vikings in the English Midlands



A very reliable source says that Æthelstan was brought up by Æthelflæd in Mercia. He knew the Mercian aristocracy, and that alliance was crucial to his ability to carry the Mercian aristocracy with him when he became king of the English.

In 927 Æthelstan invaded and conquered Northumbria and forced all the kings of Britain to submit to him. He became not only the king of all the English but also the king of all Britain. It's an extraordinary idea.

How devastating were the Viking raids and campaigns in Anglo-Saxon England during the early 10th century?

If you want to know what is in Æthelstan's head, it would be the knowledge of what had happened in his grandfathers' and parents' generation. Wessex had nearly fallen, and

there was this great royal family story of Alfred fighting in the marshes of Athelney. They really saw it as the salvation of England.

When you come into Æthelstan's youth and teens there are major battles and devastation right down the country so it was a very, very unstable time. There are odd sources, such as a letter from the bishop of Winchester to King Edward saying, "We cannot possibly pay any more taxes. The estate here has only got 90 animals left. The Viking raids and the weather have destroyed us. The raids have depopulated the villages and the landscape: we beg you for no more exactions." They're talking about an estate within a few hours of Winchester, which was the so-called capital [of Wessex] so these little hints tell you that nowhere was safe. That's why I would argue that the result was a society geared to war.

What was the condition of England when Æthelstan came to power as 'king of the Anglo-Saxons' in 924?

The condition of England was that north of the Humber there was a Viking-ruled kingdom of York that joined the kingdom of Dublin. The same kings from the same clan ruled both, and it is possible that the kingdom of Lindsey in what is now the bulk of Lincolnshire was also under their power.

In 924 Edward died on a campaign to suppress a Mercian revolt, and his heir was not Æthelstan but Ælfweard. He was slightly younger than Æthelstan but was the son of Edward's first queen, whereas Æthelstan was the son of a concubine. Ælfweard had been proclaimed as king not long before his father died so they must have known that his father was slipping. He was invested with the regalia of his office, but he died 16 days after his father. At that point the Mercians proclaimed Æthelstan as king and that's the great conundrum, because the Mercians proclaim him as king of Mercia, not Wessex. It takes a year for that to be resolved with Wessex, so there is clearly a succession crisis.

It wasn't guaranteed that Mercia and Wessex would stick together but because Æthelstan

"HE ENFORCES AN 'EMPIRE OF BRITAIN' WITH AN ARMY. ÆTHELSTAN BECAME THE MOST POWERFUL RULER SINCE THE ROMANS, AND THAT UNEASY OVERLORDSHIP SURVIVED UNTIL 933 WHEN THE SCOTS RENOUNCED THEIR ALLEGIANCE"

A 1913 illustration of the Battle of Brunanburh by Welsh artist Morris Meredith Williams. Although it was a decisive victory for Æthelstan, the casualties were reported to be huge on both sides



was favoured by the Mercians and was a West Saxon prince he trod both paths.

How significant were Æthelstan's military conquests and campaigns during the years 927-28 and 934?

The first campaign that he fought as king was after the death of his sister's husband, the Viking king of York. Æthelstan seized York, demolished the fortifications, and there may well have been fighting. Æthelstan then marched on to Cumbria, and at Eamont Bridge the kings of the Scots, Strathclyde Welsh, Cumbrians and the other northern kingdoms have to submit to him. The Welsh kings probably submitted at Hereford, and there's even a suggestion that the kings in Cornwall – the 'West Welsh' – also submit. All of the kings in Britain submitted to Æthelstan.

That first campaign of 927 was a kind of blitzkrieg, and Æthelstan probably moved down to the Welsh borders near Hereford and further down to the south west, so you can reconstruct this incredible tour around Britain where he enforces an 'Empire of Britain' with an army. Æthelstan became the most powerful ruler since the Romans, and that uneasy overlordship survived until 933 when the Scots renounced their allegiance.

In 934 Æthelstan assembled a great army at Winchester and they then invaded Scotland. A Durham source said that they went along the east coast past Aberdeen and as far as the Moray Firth. The naval expedition that went alongside it went as far as Caithness and devastated it, including perhaps the Viking settlements there. It's a sudden revelation of a military force that you never could have expected ten to 30 years earlier. It's an incredible operation and extremely ambitious. They hit the most northern point of Britain, which hadn't been done perhaps since Agricola.

Æthelstan re-established the overlordship, but it's probably the event that led the Scots to put out feelers and say, "We've got to do something about this." It ultimately led to the great coalition of 937.

ANGLO-SAXON ARMIES

What were Æthelstan's traditional military duties as king?

The Anglo-Saxons expected a king to be a leader in war. The epithets of kingship that you see in the poems, such as the famous one about the Battle of Brunanburh, refer to the "giver of rings", the "lord of warriors", and the "plunder lord". You were expected to lead the army, and the king's presence with the army was vital for its leadership.

The royal army, which went on the expeditionary campaign all the way up to Scotland in 934, was a mounted army. The core was the leadership, and there were about 140 major thegns [landowning warriors] in Æthelstan's time, and all of them had retinues. They would each have had several estates, and they could probably take quite large retinues with them. We have no idea about the size of an Anglo-Saxon royal army in the 10th century, but it was several thousand men.

How were armies structured and raised by Anglo-Saxon kings in the early 10th century?

We know so little about 10th-century warfare, but law codes talk about the obligation of landowners who receive land from the king to provide military service, including at least one mounted man for every plough, so that's a massive military obligation.

When you think of an Anglo-Saxon royal army you can of course also have a local army, and that might be led by a local earl. If a shire was attacked the local thegn or ealdorman would send his leaders out to the 'hundreds' [regional divisions] of the shire, and the people who owed military service would be brought in with their equipment. They had some rough kind of training, but they were good enough to be directed by the few professional warriors [the thegns] of the shire to fight Viking attacks.

What weaponry and equipment would have been used at battles such as Brunanburh?

The word 'knight' is Anglo-Saxon, and we think of it as late medieval, but it's Anglo-Saxon, and a thegn would have had his own equipment, including spears, a shield, sword, helmet, probably mail body armour and a horse and spare mounts. They formed a really strong and well-armoured nucleus of the army.

The thegns had really ace equipment, and the weaponry in their wills describe the value of their blades and hilts. You've only got to look at the Staffordshire Hoard, where you've got dozens of aristocratic hilt decorations from an earlier period, to see that it was portable wealth. These are really valuable possessions that could have included inlaid armour and ornamental helmets.

We haven't got any surviving examples from the 10th century, but you can imagine that you're dealing with an aristocratic elite who are trained for war. They've gone through military training, and the army leaders have probably read tactical books by Vegetius or other Latin texts that exist

from Anglo-Saxon England. It's quite likely that they actually read classical texts on how to conduct feigned retreats, for example.

It's also hard to imagine that the army going up to invade Northumbria in 927 didn't have a large baggage train with possibly mobile siege towers and portable bridges. We don't know, but they must have had these kinds of things, and they are described in the Siege of Paris with Viking armies. You can't conduct campaigns like that to besiege York and destroy the Viking fortifications [without them]. They must have had the equipment to do this because these are active stormings rather than a siege where you sit and starve them out.

What is known about the common soldiers who fought below the rank of thegn?

We just don't know, but I'm sure we underestimate the Anglo-Saxons' tactical ability: coordination, messaging separate units to join together on a particular day in a specific place, and coordinating night or surprise attacks was very common.

The Battle of Cynwit in 878 in north Devon is really interesting because Alfred was in deep trouble in Athelney, and the main Viking army was in north Wiltshire. Instead, the ealdorman of Devon, Odda, raised a force from the shire. It was not a royal army, but the Vikings suffered 800 dead, so it was a sizeable force. Odda was able to marshal a shire army that included enough people who in their normal lives were farmers but who had military training and would take orders from the leadership. You've got to have discipline and order in an army: they were not just a load of peasants who sat down and drank beer. They were able to outmanoeuvre the Viking army, storm their defences and take them by surprise. All these things suggest trained leaders.

THE 'GREAT WAR'

What were the causes of the 'Great War' of 937, and where does the term come from?

A chronicler called Æthelweard, who was an ealdorman in Somerset, was writing in about 980, and it's quite likely that his ancestors fought at Brunanburh. He said that right up to his day men in the street would refer to the 'Magnum Bellum', which can be safely translated as the 'Great Battle', but it is also conceivable that it can actually mean the 'Great War'.

The only reason I raise that translation is that we simply don't know the scale of the war. It may not just be a battle. It may be that the whole of the north was in chaos, that the devastation went right down into the Midlands, that losses were absolutely gigantic or that the war continued into the next year. There are later traditions of Æthelstan that say the Scots and Picts submitted, and a Scottish source says that he sent an army north in 938. The scale of the fighting is something we just don't know, although I think 'Great Battle' is more likely.

The cause of it was obviously the English empire and Æthelstan's aggressive policies towards Britain. This included his determination to wipe out an independent kingdom of Northumbria run by Vikings from a Dublin clan. It was also immediately incited by his aggression in 934 with the army and the fleet

**"THEY WERE ABLE TO
OUTMANOEUVRE THE VIKING
ARMY, STORM THEIR DEFENCES
AND TAKE THEM BY SURPRISE"**



Æthelstan's father King Edward the Elder as depicted in a 13th-century genealogical scroll. Edward and his sister Æthelflæd pushed the Vikings further north by capturing the East Midlands and East Anglia



Æthelstan's army
Abbey at the time
century, but the
lost during the English

**"THE LOSSES IN THE
IRISH LEADERSHIP AND
THE IRISH-VIKING ARMY
WERE HUGE, AND IT DOES
SUGGEST THAT A SIZEABLE
PART OF THE ARMY WAS
CUT DOWN ON THE FIELD"**

going all the way up Scotland. At that point his enemies decided to combine.

What is known about the alliance led by Anlaf Guthfrithson and Constantine II of Scotland against Æthelstan in 937?

Two sources say that Constantine was the instigator, and he had married a daughter to the Viking king of Dublin, Anlaf Guthfrithson. There's a very interesting source, the most famous of all Welsh prophetic poems, the *Armes Prydein* (the Great Prophecy of Britain) that calls for an alliance of all the Vikings, Irish, Norse Irish, Dublin Vikings, the Cumbrian Strathclyde, Welsh, Cornish and everybody else to join together to defeat "the Great King".

The specificity of the reference in the poem is key and suggests that by the summer of 934

a Welsh poet in Dyfed knew that people were calling for this alliance against Æthelstan to get the whole manpower of the Celtic fringe to join together to defeat him, and of course that is what happened in 937.

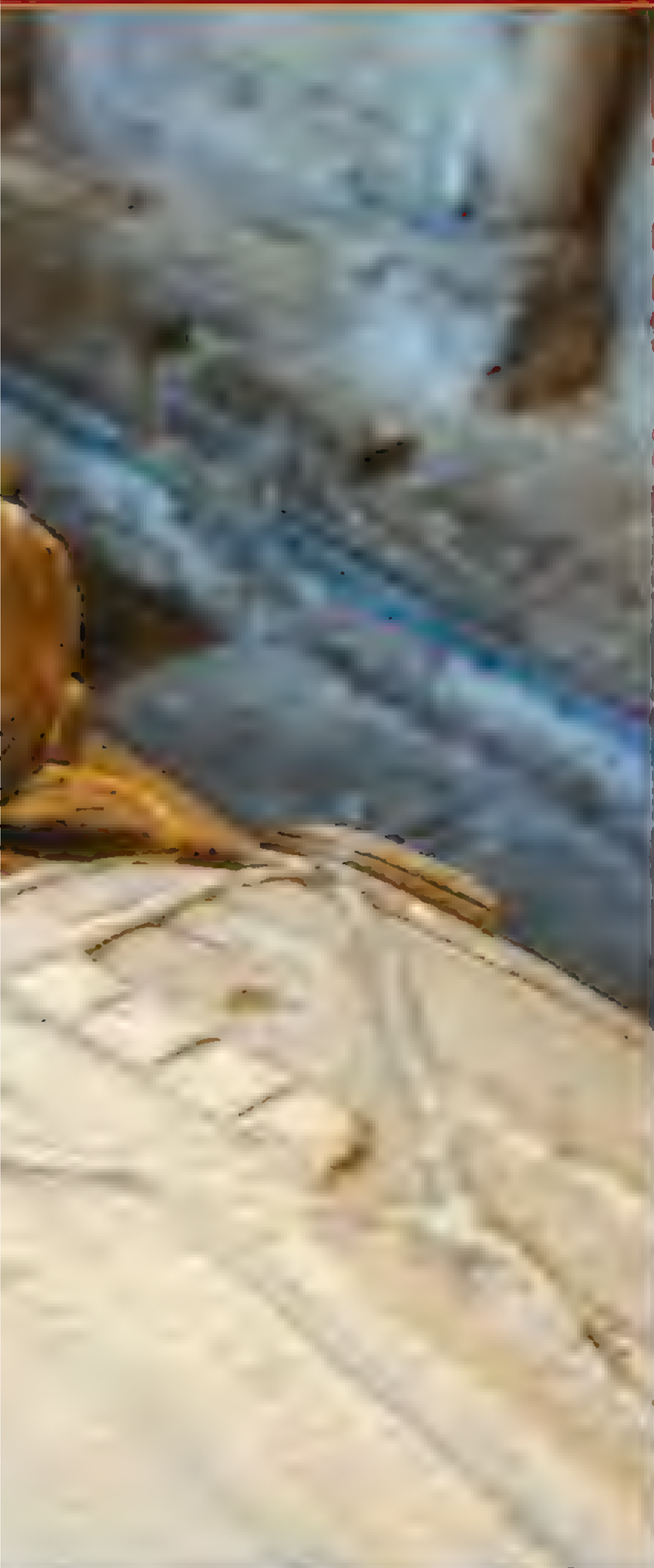
Their intention was probably not to march down to Winchester – that's not the agenda. But what they would do either by treaty or battle was to restore the kingdom of York and to say, "Northumbria is our land, and your kingdom stops there." Whether they wanted to say it stopped at Watling Street rather than the Humber is another matter, but the restoration of the kingdom of York was ultimately what they were after. That would have also ensured that the Scots wouldn't have to endure English armies attacking them again.

We are still trying to piece together the

evidence, but in Viking terms their force was massive. When it's said that "many thousands" were killed that's from a very realistic source. A Northumbrian source says that 615 ships was the size of the fleet that went into the Humber. That's not the Scottish and the North British armies coming overland, that's just the combined Viking fleet. 615 ships is the biggest Viking fleet ever in the British Isles.

How did the invasion of Æthelstan's territories unfold in 937?

The answer is we don't know, and I'm the first person to attempt a tentative construction that is really based on the available sources. One is this source by William of Malmesbury, who gives an extended quotation from a lost poem that was dismissed as just being made up in



the 12th century. When you look at it closely it's not, and there's no doubt that what he says is a verbatim quote from a lost source.

It's incredibly informative and clearly comes from a time not long after Æthelstan's death. It simply says that the Northumbrians submitted to the invaders under Anlaf Guthfrithson, so that tells you that it's in York or in the region of York. That then enables you to see how the rest unfolded, because other sources say they eventually gave battle with the help of Danes who were settled in England. That can only be in Northumbria or the East Midlands.

William's source says that the invaders devastated widely with terrible destruction. The fields were burned, the ravaging and the looting was terrible – it was horrendous. At some point York submitted, and the invading army must

have gathered somewhere on the Northumbrian border, because the fleet had landed in the Humber. From there the invaders mounted expeditions into the Midlands, but is it just plundering expeditions or an actual invasion? That's what we don't know.

The really interesting thing that then comes from the same quotation (which proves how contemporary it is) is that Æthelstan had previously been swift to act during danger. He was brilliant – invincible – and never let his enemies rest, but now he seems to have almost wasted time. It was as if he deemed his service done while they ravaged everywhere and caused such destruction. That has to be contemporary and contrasts with rather homiletic sources where the king's job was to be “seated on a high watchtower ever vigilant.”

There's no doubt that that's a real source telling you that Æthelstan, for all his great reputation, at this moment was strongly criticised for not immediately responding to the invasion. What you guess, and what the source actually says, is that he bided his time, presumably to gather more forces. Harold II did the wrong thing in 1066 by charging down from Stamford Bridge and immediately attacking [at Hastings], but Æthelstan wasn't going to let that happen. He risked the devastation of stretches of his territory to make sure that he'd got enough forces to combat this. So that is how I would tentatively reconstruct it, but it is of course pure speculation.

THE BATTLE OF BRUNANBURH

What is known about the events of the battle itself?

Not much actually. The *Anglo-Saxon Chronicle* suggests that the West Saxons pursued the North British all through the day after the defeat, but that's just a poetic phrase and it may not mean anything. It almost suggests that the Mercians and the Viking army fought it out on the field for much longer, but that's maybe reading too much into the evidence. Certainly the losses in the Irish leadership and the Irish-Viking army were huge, and it does suggest that a sizeable part of the army was cut down on the field.

However, everyone agrees that it was a gigantic battle. The *Annals of Ulster* says it was “immense, lamentable and horrible” and savagely fought. “Many thousands” of the Viking army were killed, and a “multitude” of the English were killed as well, so they have some knowledge of what happened. Anlaf Guthfrithson only escaped with “a few” so it's an absolutely gigantic defeat and resonated in lots of sources.

What is known about the casualties of the battle on both sides?

There are various accounts of bishops and nobles that were killed on the Anglo-Saxon side. One story names two of Æthelstan's cousins as being killed, and they were buried at Malmesbury in Wiltshire.

There is a strong York tradition that Æthelstan founded Saint Leonard's Hospital around that time, and one tradition says that it was after the battle. Was this an expiation of his sins for having killed so many people, or

doing something nice for the Northumbrians? Who knows, and I haven't been able to prove it yet.

On the Viking side the casualties included five kings and seven earls. The heir to the king of Scots was killed, and there is an Irish source that lists a lot of the dead. The aristocracy bore the brunt of the fighting in some of these battles, and they led by example. If things went wrong then the losses could be massive. Losses in leaders were often very heavy, and they definitely were at Brunanburh.

How did Æthelstan's contemporaries receive the victory at Brunanburh?

The *Anglo-Saxon Chronicle*, which was written two years after Æthelstan's death in 939, says it was the greatest victory since the Angles and the Saxons first came over the wide seas to Britain to win themselves a kingdom. That's the historical context that they see it under, and there's quite a few other sources that see it in that light. It goes into folk legend, late medieval sagas, hagiography, miracle stories and right down to Elizabethan drama. It became a great source of legend so it's a big story.

A POWERFUL LEGACY

Could it be argued that 937 is as important as 1066 in early medieval English history?

I wouldn't say it was as important as 1066 because that was a catastrophic rupture, but it is one of the great decisive moments in early British history. The historian Frank Stenton said that the victory at Brunanburh wasn't as decisive for the future as the Battle of Edington [in 878] but of course if Æthelstan had lost, been killed and his leadership wiped out then it would have been a very different story.

What was the impact of Æthelstan's reign and his victory at Brunanburh?

Æthelstan died two years later, and his empire in the north immediately collapsed. Although it was fairly rapidly restored they did have to fight another 20 years to make sure that Northumbria became a part of the kingdom of the English.

His reign left a template for a kingdom of all the English, including the regal styles and the titles. He pretty much established that, up to the Humber, Northumbria would be a part of the English kingdom. A lot of his ideas proved useful to the future, including his lawmaking, a coinage for the whole realm and even extending Alfred's translation program. Æthelstan was really ambitious and saw himself as a late Carolingian king.

It is a premature kingdom of all the English but it is there, and later generations always saw him as the first king even though he possibly overreached himself in many ways. His model was probably [Saint] Bede's “gens Anglorum”: the English people. These can include Mercians, West Saxons, people of Danish descent, Cornish, Welsh people and speakers on the English side of Offa's Dyke. It was a nation, as one 10th century source says, of many different languages, customs, costumes and so on. In a sense, it's a visionary kingdom based on Bede's blueprint that Alfred then dreamed up and Æthelstan brought into being.





Great Battles

CRÉCY

English and Welsh longbowmen changed the nature of European warfare when they helped Edward III win a decisive victory at the beginning of the Hundred Years' War

WORDS TOM GARNER

CRÉCY-EN-PONTHIEU, PICARDY, FRANCE 26 AUGUST 1346

It is a summer's day in northern France, and on a Picardy hillside tens of thousands of soldiers have assembled to engage in a battle of two kings. One is defending his kingdom while the other has come to claim it. Two other monarchs are also present, but common soldiers dominate this noticeably regal battle.

Genoese crossbowmen are ordered by the French king, Philip VI, to attack the positions of his English rival, Edward III. As they advance a thunderstorm breaks out, and when it clears deadly arrows replace the raindrops. These shots are so rapid that the chronicler Jean Froissart reported, "it seemed as if it snowed". The sun then shines into the crossbowmen's eyes so that they are now blind as well as beleaguered. The Genoese flee from this hellish eruption. The bloody encounter begins a battle that will transform European battlefields.

This momentous engagement became known as the Battle of Crécy, and it was the first of three major English victories during the Hundred Years' War – the other two being the Battles of Poitiers and Agincourt. Although Agincourt became the most famous of the three, and Poitiers involved the capture of a French king, it is Crécy that is arguably the most important.

It confirmed the military reputation of Edward III, established the fighting career of his heir, Edward 'the Black Prince', and heralded the rise of the longbow and infantrymen in medieval warfare. Crécy also signalled the decline of knightly chivalry on the battlefield, despite the fact that Edward III established the Order of the Garter two years later. In fact, Edward's chivalric ostentations were only skin-deep, and Crécy was a manifestation of the English king's pragmatically ruthless strategies and his burning ambition to rule not just one kingdom, but two.

"Excesses, rebellions and disobedient acts"

Although the Hundred Years' War (1337-1453) was a series of intermittent conflicts conducted over a very prolonged period, its root cause remained the same. The war was primarily

conducted between the Plantagenet and Valois dynasties over the right to rule the kingdom of France, and it was Edward III who vigorously sparked the momentous conflict.

In the early 14th century, the English and French monarchies were deeply intertwined. The English had held lands in France since the Norman Conquest as fiefs to the French monarch. At one point Henry II's Angevin Empire covered England and half of modern France, but by Edward III's accession in 1327 only Aquitaine (which was variously known as Gascony or Guyenne) remained in English hands.

Nevertheless, his familial tie to the French monarchy strengthened Edward's ambitions in France. His mother Isabella was the sister of Charles IV, and as his nephew, Edward believed he had a strong claim to the French throne. His claim was declared in 1328 when Charles died without a direct male heir, and Isabella claimed the throne on behalf of her son. Edward was on the cusp of becoming the ruler of a dual-monarchy, which would have made him the most powerful king in Europe. The French thought differently.

Edward's claim was declared invalid by the French, who declared that ancient 'Salic Law' prevented women from claiming the throne for themselves or their children. Despite the fact

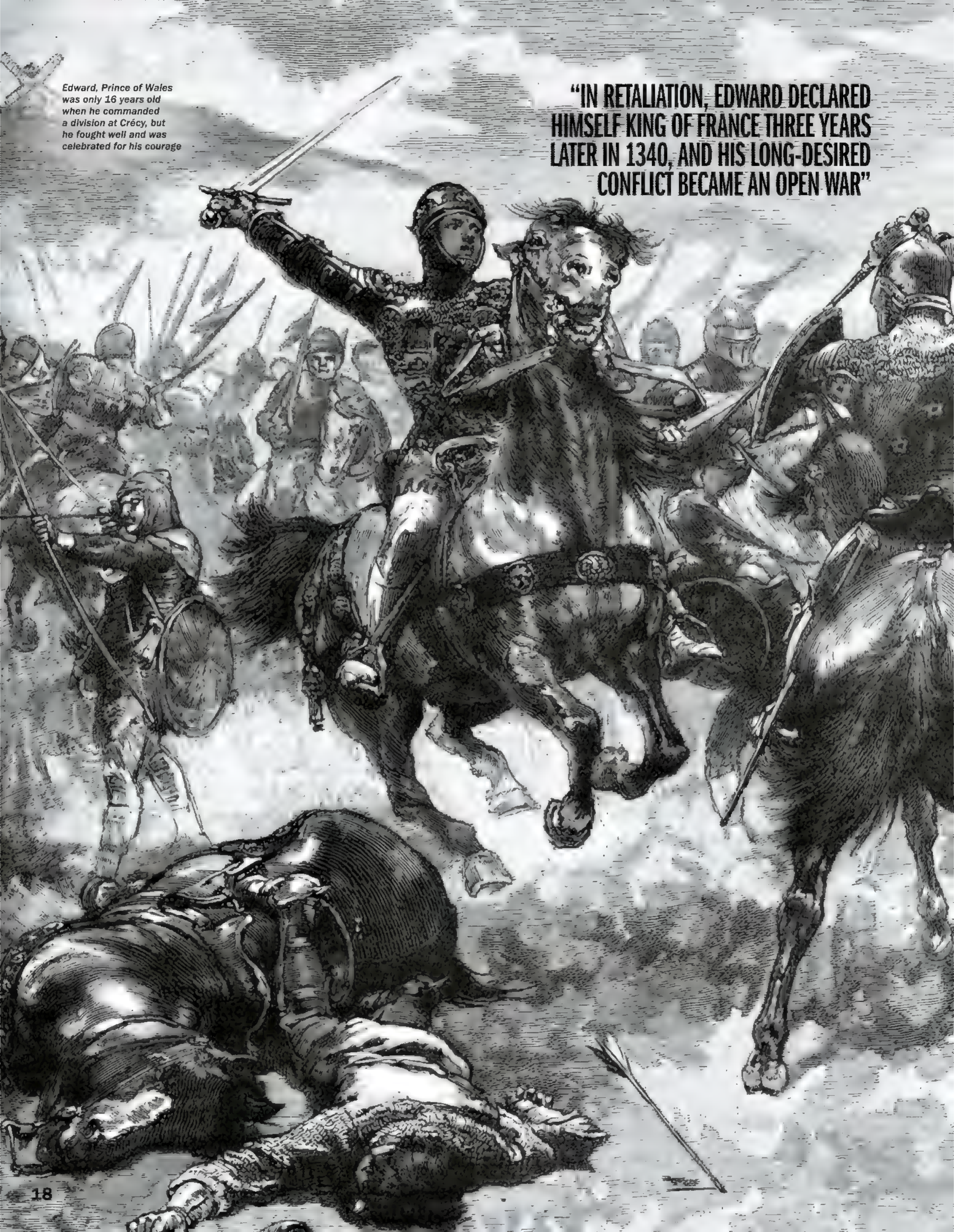
Below: Although Philip VI is arguably best remembered for his defeat at Crécy, he had previously been a successful battlefield commander, particularly at the Battle of Cassel in 1328



Left: The Battle of Crécy as depicted in a 15th-century illuminated manuscript of Jean Froissart's Chronicles. Longbowmen (right) are clearly shown fighting slow-loading Genoese crossbowmen

Edward, Prince of Wales was only 16 years old when he commanded a division at Crécy, but he fought well and was celebrated for his courage

"IN RETALIATION, EDWARD DECLARED HIMSELF KING OF FRANCE THREE YEARS LATER IN 1340, AND HIS LONG-DESIRED CONFLICT BECAME AN OPEN WAR"



that Edward was Charles's closest surviving male relative, the French chose Philip of Valois as their new king. Philip was a first cousin of Charles and he was duly crowned as Philip VI.

Edward did not seriously contest Philip's accession at first and even paid personal homage for his French lands in 1329, but tensions grew over the following decade. Edward was often counselled to "defy the French king who kept his heritage from him wrongfully," and he was willing to oblige. He goaded the French by creating trade problems in Flanders, and in 1337 Philip confiscated Aquitaine from Edward. His reason for the forfeit was because of the "many excesses, rebellions and disobedient acts committed by the King of England against Us and Our Royal Majesty."

In retaliation, Edward declared himself king of France three years later in 1340, and his long-desired conflict became an open war. The English won a crushing naval victory at Sluys in June 1340 and went on to conduct a destructive raiding invasion in northern France and the Low Countries. Nevertheless, it wasn't until 1346 that Edward raised enough funds to launch a proper campaign in France and met his nemesis Philip in battle.

The Normandy chevauchée

On 13 July 1346, Edward landed at Saint-Vaast-la-Hougue on the Cherbourg Peninsula in hundreds of ships that contained around 15,000 men. At the time this was one of the largest expeditionary forces in English history, and Edward's army proceeded to wreak deliberately destructive havoc in Normandy. Known as a 'chevauchée', the violence was a policy of burning and pillaging in order to intimidate the local population and reduce the productivity of the region. For Edward, this form of war was designed to strike at Philip through his subjects, and the results were devastating.

Many Norman towns, including Barfleur and Cherbourg, were burnt, along with the surrounding countryside, but it was Caen that suffered the most. When the garrison surrendered the English soldiers "were without mercy" and began to loot, rape and kill the inhabitants. One chronicler reported that there

were "many evil deeds, murders and robberies in the town," and Edward personally profited from vast amounts of plunder, including gold, silver and hundreds of ransomed prisoners.

After torching Normandy, Edward moved on to wreak destruction in the direction of Paris, although territorial conquests were not actually his aim. He reckoned that Philip would be brought to the negotiating table by economic damage or that he would be so angry that he would seek Edward out in battle. The English king was spoiling for a fight and wanted Philip to divert his attention away from Aquitaine. Edward got his wish, and Philip assembled as many troops as possible while sending reinforcements to Rouen.

Despite his advance on the French capital, Edward never intended to besiege Paris because he lacked an adequate siege train. The English were also heavily outnumbered by Philip's army, which was assembling at Saint-Denis. The French intended to trap Edward's force by blocking bridges on the River Seine, but the English repaired a bridge at Poissy and retreated northwards, burning everything along the way.

Battle of Blanchetaque

Edward's path was blocked again at the River Somme, and Philip was now in hot pursuit. Fortunately for the English, a passable ford was found at Blanchetaque near Abbeville.

"THE FRENCH INTENDED TO TRAP EDWARD'S FORCE BY BLOCKING BRIDGES ON THE RIVER SEINE, BUT THE ENGLISH REPAIRED A BRIDGE AT POISSY AND RETREATED NORTHWARDS, BURNING EVERYTHING ALONG THE WAY"

Nevertheless, a large force of French soldiers and Genoese crossbowmen in French service defended the opposite bank. English archers forced their way across in a "sore battle" on 24 August, but Philip simultaneously attacked Edward from the rear and even captured some of his baggage train. The Somme's waters then rose and the French were prevented from crossing in pursuit.

The fighting at Blanchetaque is a historical footnote compared to the battle at Crécy two days later, but if the English had failed to cross the ford, then subsequent events would have turned out differently. By this time Edward's men were exhausted from marching, and their food supplies were very low. Blanchetaque was also the last river crossing before the sea, and if the English had been trapped they ran a very high chance of being destroyed by Philip.

As it was, the successful crossing meant that Edward could now choose his ground for the inevitable battle and had a route to safety. If the battle went wrong then his army would retreat to Flanders, a friendly territory with strong connections to the English wool trade.

Edward soon found a perfect position on rising ground near the small town of Crécy-en-Ponthieu. The English positioned themselves on a hill that was crowned by a distinctive windmill. Below them was an open space known as the 'Valley of the Clerks'. Edward's army was protected on all flanks: to his centre and right flank was the small River Maie, while large woods surrounded his force at a safe distance.

Edward established his command post and deployed his men in order of battle. His 16-year-old son and heir Edward, Prince of Wales, commanded his right flank and centre. The prince was inexperienced so he was to be supported by able veterans such as Sir John Chandos and Geoffrey d'Harcourt. The earls of Northampton and Arundel commanded the king's left flank, while Edward himself commanded a reserve division from the windmill. The mill offered commanding views over the battlefield, and the king could easily direct operations from there.

Once these divisions were deployed the chronicler Jean le Bel recorded that Edward



English longbowmen practise archery at the butts, as depicted in the Luttrell Psalter c.1320-45. All Englishmen were required to practise archery every Sunday

Park

Windmill

English route from
Blanchelaque Ford

06 THE BLACK PRINCE WINS HIS SPURS

Despite the heavy volleys, continual French cavalry charges finally reach the English lines. The division of Edward, Prince of Wales is hit particularly hard, but the king's heir shows great courage and the French are ultimately driven back.

01 DEPLOYMENT AT THE WINDMILL

Edward III assembles his men on a hillside near Crécy-en-Ponthieu and divides them into three divisions. The Black Prince and the earl of Northampton command the English right and left flanks, while the king commands a reserve division at the hilltop windmill. A front line of archers connects Northampton's and the prince's divisions.

KING

Wells

BLACK PRINCE

NORTHAMPTON

Archers

Archers

Archers

07 LAST CHARGE OF JOHN OF BOHEMIA

Although he is blind, King John orders the horses of his retinue to be tied with his so that he can personally fight the English. The Bohemians attack the Black Prince's division, but although they fight with great courage the majority are killed, including John.

03 THE GENOESE ADVANCE

The French are so keen to fight that their large numbers create disorder. Philip orders Genoese crossbowmen to begin the battle by advancing within shooting distance of the English lines. A thunderstorm breaks out and hinders their progress, while Edward's archers protect their bowstrings from the rain.

04 LONGBOWMEN'S DEADLY VOLLEYS

The rain stops and the evening sun shines into the eyes of the Genoese. The English use this to their advantage by loosing murderous volleys of arrows at the crossbowmen. Their accuracy creates panic and the Genoese retreat. The crossbowmen are then cut down by furious French knights, who launch a disorganised charge against the English.

05 ARROWS, CONFUSION AND CANNON FIRE

The clash of the Genoese with their French allies provides the English with an opportunity to continually rain down arrows on what is increasingly becoming a bloody field. The English even fire primitive cannons at the French, although their impact is insignificant.

Crecy Church

Great Battles

CRÉCY
26 AUGUST 1346

Vallée des Clercs

02 PHILIP VI ARRIVES

While the English rest in position, Philip VI's extremely large French army comes onto the battlefield. It consists of huge numbers of mounted men-at-arms and an unknown number of infantry. Enthusiasm is strong among the soldiers and local people to destroy the English.

Estrées les Crecy

**OPPOSING FORCES****ENGLAND****LEADER:**

Edward III

NOTABLE**COMMANDERS:**

Edward,

Prince of Wales

William de Bohun,

Earl of Northampton

Sir John Chandos

SOLDIERS:

c.14,000

VS**FRANCE****LEADER:**

Philip VI

NOTABLE**COMMANDERS:**

Charles II,

Duke of Alençon

Rudolph,

Duke of Lorraine

John the Blind,

King of Bohemia

SOLDIERS:

c.20,000 - 40,000

08 PHILIP ABANDONS THE FIELD

The French launch successive assaults until after dark, but they cannot break the English defences. Philip loses several horses and receives an arrow wound before reluctantly leaving the battle. After his withdrawal the majority of the French army retreats in disorder, while the victorious English sleep at their positions.



English Army



French Army

Map: Rocio Espin

"went among his men, exhorting each of them with a laugh to do their duty, and flattered and encouraged them to such an extent that cowards became brave men". At this point every man bedded down on the earth to rest before the enemy came.

Longbowmen, 'kern' and cannons

These soldiers, whose courage Edward appealed to, were not part of an ordinary medieval army – their composition and equipment were revolutionary in continental Europe. Edward's slightly reduced force at Crécy consisted of approximately 2,000 men-at-arms, 500 lancers, 1,500 spearmen and 7,000 archers. In an age when cavalry was prized and central to battles, the predominance of foot soldiers was astonishing in itself, particularly for a man like Edward who was obsessed with knightly culture.

The English men-at-arms, who were mounted armoured knights and esquires, were actually the least important part of Edward's army. These men were still mostly armoured in chain mail, which was in contrast to the French, who were better protected with newer plate armour.

Nor should it be assumed that Edward's army was exclusively English. Large numbers of his men were Welsh, Cornish and Irish spearmen who were armed with dirks and javelins.

These men were known as the 'kern' and were recorded as "certain rascals that went on foot with great knives". Their talent was for bringing down horses, but their importance was small compared to the English and Welsh archers.

Edward's archers formed the bulk of his army and carried the famous longbow. This unique bow revolutionised military tactics and was largely unknown outside of the British Isles in 1346. Longbows could measure between 1.7-1.9 metres (five feet seven inches-six feet three inches) in length and despite becoming an English military icon they were actually Welsh in origin. Edward I had been impressed by their shooting ability during his conquest of Wales in the late 13th century, and from his reign all English villages practised archery every Sunday.

Longbows were standardised by 1346, and each longbowman trained from an early age to loose 10-12 arrows per minute. This required great strength, as the bow required a draw-weight of 36-45 kilograms (80-100 pounds), but the result was the equivalent of a medieval machine gun. The sky was known to darken under a heavy barrage from longbows, and each arrow had a fighting range of 135 metres (150 yards) and could pierce plate armour at 55 metres (60 yards). Each archer carried around 24 arrows as well as secondary weapons such as swords, axes, billhooks or mallets. The longbowman may have come from peasant stock but he was extremely formidable.

"THESE MEN WERE KNOWN AS THE 'KERN' AND WERE RECORDED AS 'CERTAIN RASCALS THAT WENT ON FOOT WITH GREAT KNIVES'"

Edward III certainly knew his archers' worth. Longbowmen had played a critical role in his grandfather Edward I's victory against Sir William Wallace at the Battle of Falkirk in 1298. Edward had also directly experienced the longbow's power in his decisive victory against the Scots at the Battle of Halidon Hill and at sea at the Battle of Sluys. The French were the longbow's victim at Sluys but they remarkably failed to take notice of Edward's archers due to their belief that mounted knights were superior soldiers.

Longbows were not the only missile weapons in Edward's arsenal. The English are reputed to have had guns on the Crécy campaign, which were primitive tubes mounted on a cart. Artillery had never been used on a European battlefield before, but their effectiveness would have been more psychological than practical. Their lethality was questionable, but they would have produced flames, smoke and, above all, previously unheard noise.

A "very murderous and cruel" battle

Despite the formidable equipment of the English army, their opponents were not to be underestimated. It was the English who were retreating in a poor condition, and Philip's confidence was arguably not misplaced when he arrived on Saturday 26 August 1346.

Estimates vary wildly as to the exact size of his army, but it was a huge host that numbered between 20,000-40,000 men. This included men-at-arms who almost outnumbered the English on their own, as well as large numbers of Genoese crossbowmen.

As well as the Genoese, Philip was accompanied by nobles from across Europe, including the blind King John of Bohemia, James III of Majorca and the future Holy Roman Emperor Charles IV and Charles I of Monaco. Philip was a distinguished soldier who had won a

"FRENCH MEN-AT-ARMS BEGAN A DISORGANISED CHARGE AND TRAMPLED OVER THE CROSSBOWMEN, WHILE THE ENGLISH CONTINUED TO LOOSE VOLLEY AFTER VOLLEY"

great victory at the Battle of Cassel in 1328. His army at Crécy was the "Flower of France", and for the French the only outcome could be glory.

Nevertheless, the French army was so large that it was impossible to control. Many men at the front tried to halt in order before the English, but impatient men-at-arms pushed them forward from behind. The roads between Abbeville and Crécy were also jammed by local peasants and townsmen, who were encouraging Philip's force to kill the English. Philip ordered the Genoese to make the first attack through the disorder, and a line of crossbowmen advanced to within 135-180 metres (150-200 yards) of the English.

Under the circumstances, the Genoese were not the best troops to make the first attack. They had marched for kilometres carrying their heavy crossbows, and their slow loading time meant that they were vulnerable against the faster longbow arrows. Bad luck also dealt them a blow when a short, sharp thunderstorm drenched them as they advanced. By contrast, the English shrewdly dismantled their bowstrings and covered them under their hats to keep them dry during the downpour. When the rain cleared they quickly restrung their bows, just as the evening sun began to shine in the eyes of the unfortunate Genoese.

It was perfect timing for the English, who gave a great shout, stepped forward and rained arrows down on the crossbowmen. The Genoese quickly dropped their crossbows and retreated. Charles, Count of Alençon was so enraged by the Genoese's retreat that he cried, "Ride down this rabble who block our advance!" French men-at-arms began a disorganised charge and trampled over the crossbowmen, while the English continued to loose volley after volley.

In the rear of the French army, the cries of the Genoese were mistaken for the English being killed, and so they also pressed forward. This created a confused mob that was being decimated by accurate longbow marksmanship. Jean le Bel, who spoke to eyewitnesses, said, "A great outcry rose to the stars," and horses began to pile on top of the other "like a litter of piglets". The French cavalry were "sumptuously equipped" but it made no difference against the archers. It was at this point that Edward's guns were used, and they reportedly terrified the already traumatised horses.

Despite the carnage, some of the French, including Alençon, managed to reach the English lines through doggedness and sheer weight of numbers. They hit the Prince of Wales's division particularly hard and the king's heir was knocked off his feet. His standard-bearer Richard de Beaumont successfully defended the prince until he could stand, and appeals were sent to the king for reinforcements. Froissart recorded that when Edward heard that his son had not been killed he said, "As long as my son has life let the boy win his spurs; for I am determined that all the glory and honour of this day shall be given to him."

This example of martial chivalry is a good story, but another chronicler recorded that Edward did send reinforcements to the prince,

A romanticised depiction of Edward III fighting at the Battle of Blanchetaque. This engagement enabled the English to cross the River Somme before the Battle of Crécy.



but the prince and his men were found resting on their swords, surrounded by corpses, as they waited for the next attack. Whatever the truth, Crécy was the foundation of the Black Prince's reputation.

Alençon was killed in the fighting, and soon another noble, the blind King John of Bohemia also lost his life. John was informed how the battle was proceeding, and when he heard his son was fighting he said to his attendants, "As I am blind, I request of you to lead me so far into the engagement that I may strike one stroke with my sword." The Bohemian retinue's horses were tied together with an insistent John at the head. The king rode into the English and "made good use of his sword; for he and his companions fought most gallantly". The Bohemians rode until they were killed and their bodies, including John's, were found tied together the next morning. Only two of his retinue lived to tell the tale, and Prince Edward was so moved that he reputedly adopted John's crest and motto 'Ich Dien' ('I Serve') as his own. It is still the official heraldic badge of the Prince of Wales.

The French army charged against the English 15 times during the battle, and each charge was cut down in disorder by the longbowmen. The fighting became "very murderous and cruel" with the English giving no quarter and refusing ransoms. The Irish and Cornish kern in particular "slew many as they lay on the ground,

both earls, knights, barons and squires." The attacks continued until nightfall, when Philip (who had been wounded in the neck by an arrow and unhorsed at least once) led a futile charge of 60 men-at-arms. He was saved from death when the count of Hainault persuaded him to leave and win another day. Philip rode to the nearest chateau with only five attendants and famously shouted outside the gate, "Open your gate quickly, for this is the fortune of France!" After briefly resting, the king then rode on at night to safety at Amiens, but his defeat was calamitous.

Onwards to Calais

The battle did not finally end until nightfall, and the English remained in their positions and slept on the ground. Even when dawn broke there was a thick fog that initially obscured the battlefield. After the earl of Northampton fought off a final French force of militia and Norman knights, Edward was finally able to observe the scale of his victory and ordered the dead to be counted.

The result was shocking. As well as John of Bohemia, the French had lost many of their senior nobles – the duke of Lorraine, Alençon and around ten other counts, including those of Flanders, Blois and Auxerre. Over 1,000 lords and knights were killed and at least 10,000 'common' soldiers died, although the true figure will never be known. While the French dead were counted, the kern went across the

battlefield and gruesomely murdered the enemy wounded and pillaged them, only sparing the ones that were deemed worthy of ransom. By contrast, Edward reputedly lost only around 100 men, although chroniclers may have downplayed his losses.

What is not in doubt is that Crécy was one of the most crushing victories of the 14th century. English soldiers had previously been poorly regarded in Europe, but the battle was an unexpected triumph of 'firepower' over armour, and as such it was something of a military revolution. Although Edward was in no position to take Paris afterwards, he proceeded to attack Calais in a siege that lasted from September 1346-August 1347. Throughout this time Philip was reluctant to relieve the siege because he feared a repeat of Crécy. Once the port had fallen it became a key English base for the rest of the Hundred Years' War, and was held by the English until 1558.

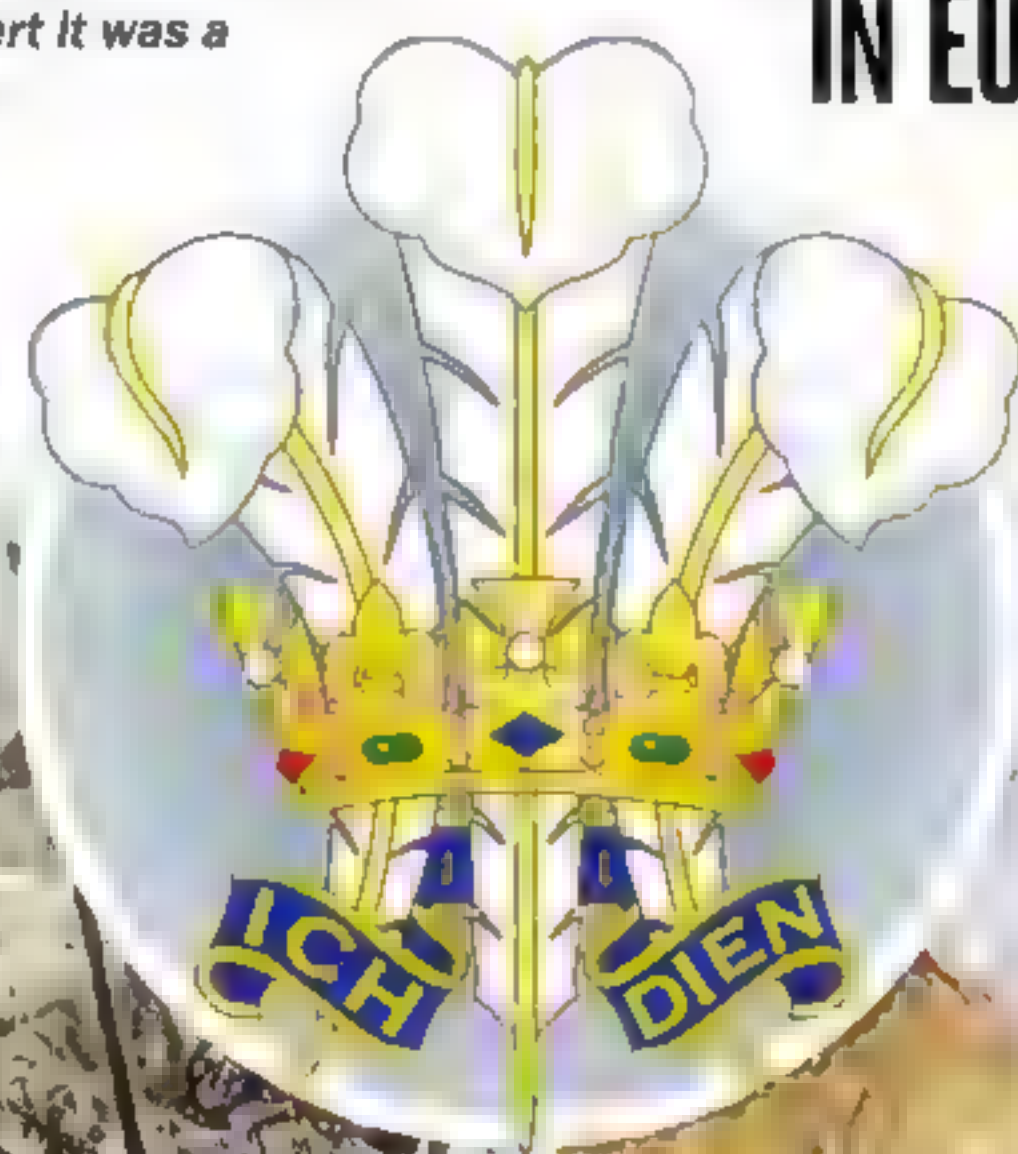
Despite many more victories and territorial gains, Edward III never succeeded in becoming king of France, but Crécy still left a terrible legacy. Bloody though it was, the battle and subsequent capture of Calais was the true beginning of England's brutally confident and often successful campaigns in France. It ensured that the English would only continue to press their royal claims even harder, and the result was a conflict that cost countless dead and lasted for 116 years.

Inset: The origin of the heraldic badge of the Prince of Wales is often attributed to the Black Prince at Crécy. Some claim it was adopted to commemorate John of Bohemia's bravery, while others assert it was a tribute to the prince's Welsh archers

Below: The death of King John of Bohemia at Crécy. The blind monarch's courage was one of the most famous tragedies of the battle

"ENGLISH SOLDIERS HAD PREVIOUSLY BEEN POORLY REGARDED IN EUROPE, BUT THE BATTLE WAS AN UNEXPECTED TRIUMPH OF 'FIREPOWER' OVER ARMOUR, AND AS SUCH IT WAS SOMETHING OF A MILITARY REVOLUTION"

Edward III counts the dead on the battlefield of Crécy. The aftermath of the battle was a grisly affair, where Irish and Cornish spearmen murdered the wounded and looted their possessions





WAR_{in} **FOCUS** **TOXIC EXCHANGE**

Taken: 23 October 1990

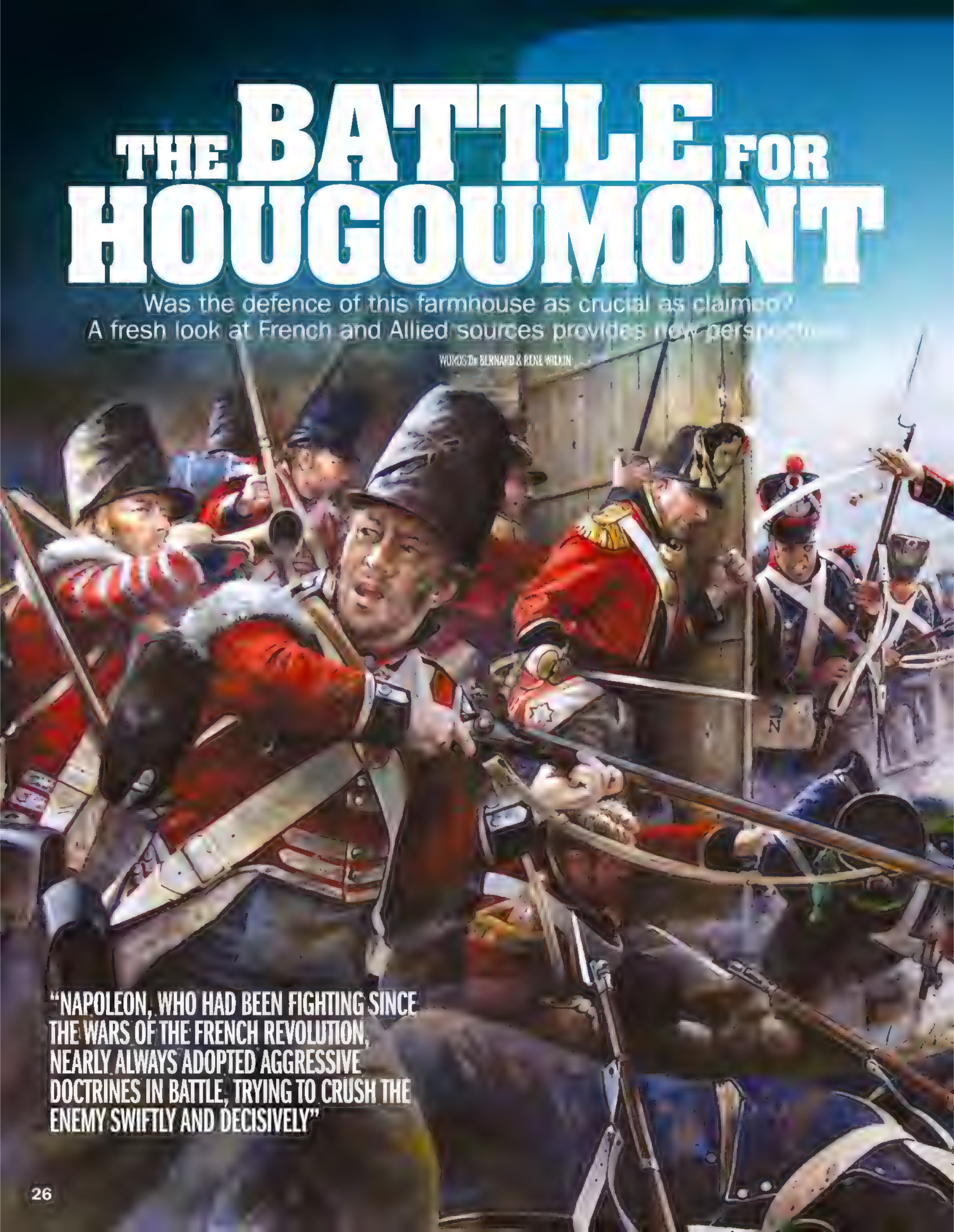
French Foreign Legion soldiers conduct chemical warfare training in the Saudi desert, near Hafr al-Baten, prior to Operation Desert Storm. Coalition forces contesting the occupation of Kuwait by Iraq were prepared for potential chemical weapons to be used against them in combat. Iraq was known to have possessed such weapons and used them against its Kurdish population.



THE BATTLE FOR HOUGOUMONT

Was the defence of this farmhouse as crucial as claimed?
A fresh look at French and Allied sources provides new perspective

WORDS BY BERNARD & RENE WILKIN



"NAPOLEON, WHO HAD BEEN FIGHTING SINCE THE WARS OF THE FRENCH REVOLUTION, NEARLY ALWAYS ADOPTED AGGRESSIVE DOCTRINES IN BATTLE, TRYING TO CRUSH THE ENEMY SWIFTLY AND DECISIVELY"

On 18 June 1815, Napoleon's cannon opened fire on the Allied army at around 11.35am (the exact time is a source of disagreement among witnesses and historians). The Battle of Waterloo had just begun. The French wanted to destroy Wellington's army as well as the Belgian-Dutch military, convinced that the British would sign a peace treaty if Brussels were taken and the enemy general driven out of Belgium.

On the other side, the Duke of Wellington was determined to counter the French offensive in Belgium before stopping the troublesome French emperor once and for all. Both commanders had plenty of experience on the battlefield but displayed very different military styles. Napoleon, who had been fighting since the Wars of the French Revolution, nearly always adopted aggressive doctrines in battle, trying to crush the enemy swiftly and decisively. His military might was indisputable, but historians and witnesses have noted that he was not at his best during the Hundred Days. Tired, depressed and overweight, he was probably not fit to lead an army as effectively as previously. Wellington, a cautious commander, preferred defensive positions in order to preserve his men. His careful approach to battle, combined with British discipline in the heat of the action, was key to his many victories during the Peninsular War.

Image: Chris Collingwood www.collingwoodhistorical.com

British soldiers slam the gates of Hougomont farm on the onrushing French forces

Caution was precisely the reason Wellington picked Mont-Saint-Jean to fight the French army. The British commander knew the place already, having noticed its favourable topography the year before. The gentle slopes and the hills around the small hamlet would protect his men from the French cannon. Moreover, four key positions could potentially stop the enemy: the castle of Ficherfont (also spelled Frischerfont) and the farms of Papelotte, Haze Sainte and Hougomont (in fact a farm-castle).

On 17 June General Cooke was ordered to reinforce Hougomont with the light companies of his four battalions of the Guards (First Division). Colonel Macdonnell was made commander of the castle and the farm. One witness, a man named Maaskamp, saw the British at Hougomont the day before the battle: "During the night, they prepared for the castle's defence. They dug a pit next to the outside hedge, and there was a reinforced wall behind the hedge around the garden and the orchard. They dug loopholes in the wall and placed an elevation platform to fire above it." Companies of the Second Brigade occupied the garden as well as the farm, while men of the First Brigade, commanded by Lord Saltoun, were positioned in the orchard and the wood.

Early on 18 June 1815, the Duke of Wellington, the Prince of Orange, Generals Hill and Uxbridge, and Muffling, a Prussian officer, inspected the Allied lines before going down

"AFTER A SHORT INSPECTION, THE GENERAL FAILED TO REPORT THE DANGEROUS STRONGHOLD. HAXO'S SLOPPINESS WAS UNFORGIVABLE, EVEN IF HOUGOMONT WAS HIDDEN NOT ONLY BY THE WOOD BUT ALSO BY THE TOPOGRAPHY OF THE REGION"

to Hougomont. The Prince of Orange, having had a close look at the farm-castle, sent 300 men to reinforce it. Wellington also positioned the light company of the Coldstream Guards and men of the Third Guards to the west of Hougomont. Soldiers from Nassau and Hanover were placed in the wood. At 10.00am, Captain Büggen and six companies of the Second Nassau Regiment arrived, totalling 800 soldiers. 400 men were positioned in the orchard while the others occupied the farm-castle. As a result, most of the men in the garrison on the day were German. Light companies of the Third Guards were moved to the western lane area, and men of the light company of the Coldstream Guards were ordered to defend the north gate and the buildings of the lower courtyard.

Confusion and visibility

The farm-castle of Hougomont was hidden from the French line by a small wooded area. The map used by Napoleon and his generals,

made by Ferraris between 1770-1778, showed Hougomont itself, but the walls around the structure were not clearly drawn and the wood looked far more accessible than in reality.

Before the battle, the emperor had ordered General Haxo, commanding the génie (military engineering), to reconnoitre the enemy lines. After a short inspection, the general failed to report the dangerous stronghold. Haxo's sloppiness was unforgivable, even if Hougomont was hidden not only by the wood but also by the topography of the region. The fortified farm-castle was equally invisible from Rossomme farm, where Napoleon stood during the first part of the battle. This important point was highlighted early: in 1817 a British man named John Booth wrote that, "It is said the enemy were ignorant of the strength of the position, the garden wall being concealed by the wood and hedge."

At 11.00am General Reille, commander of the French II Corps, was asked to take the wood of Hougomont. It should be noted

A private of the wagon train bringing ammunition to the farm-castle



that Napoleon's order did not mention the farm-castle. This objective was explained by Napoleon in his book: the attack was supposed to be a diversion, a way to draw Wellington's men away from the centre, the point of the main French assault. From Wellington's perspective, the loss of Hougoumont was unthinkable. The capture of the farm-castle would have threatened his right wing and the whole Allied position. A vigorous defence was therefore required.

Reille sent Napoleon's brother, Prince Jérôme, and four regiments on the left. To protect the soldiers moving towards Hougoumont, a division battery belonging to II Corps opened fire. The horse battery of Piré's cavalry division was also sent to support the assault. The artillery, however, was unable to fire directly at the farm-castle. Three British batteries, east of the road to Nivelles, riposted. The battle for the British right wing had just begun.

The first regiment of light infantry launched a bayonet assault to take the wood, an action that saw the death of General Bauduin. Despite

Hougoumont as seen on the Ferraris map, used by the French army at Waterloo

their resilience, the First Battalion of Nassau and a company of the King's German Legion (KGL) were forced to retreat but were soon assisted by British soldiers. To take the 300 remaining metres (330 yards) separating the French from the farm, the Third line infantry regiment followed the First Léger. Allied defenders, vastly outnumbered, took cover behind the trees to fire back at the enemy. After an hour of heavy fighting, the French managed to repel the soldiers of Nassau as well as the British who had come forward to help them. However, upon exiting the wood, Jérôme's men found themselves in a killing field – an empty space of 30 metres (33 yards) between the trees and the farm.

Reille's orders, given to him at 11.00am, did not ask for the capture of the farm-castle. The initial assault on Hougoumont was in fact unnecessary. It was either a misunderstanding or Jérôme Bonaparte's responsibility. It is also possible that the French, having pushed the Allies from the wood, spontaneously attacked the farm. However, Hougoumont was far from easy to capture. Firing through improvised loopholes, soldiers of the Second Company, Second Nassau took aim calmly at the nearby targets.

At such short distance, the French were hard to miss. Jérôme's men returned fire but wasted their shots on the protective wall. The British sent more artillery until the ridge above the farm-castle was lined with guns.

The French storming La Haye Sainte, defended for six hours by the KGL



The defence of the wall against the French emerging from the wood



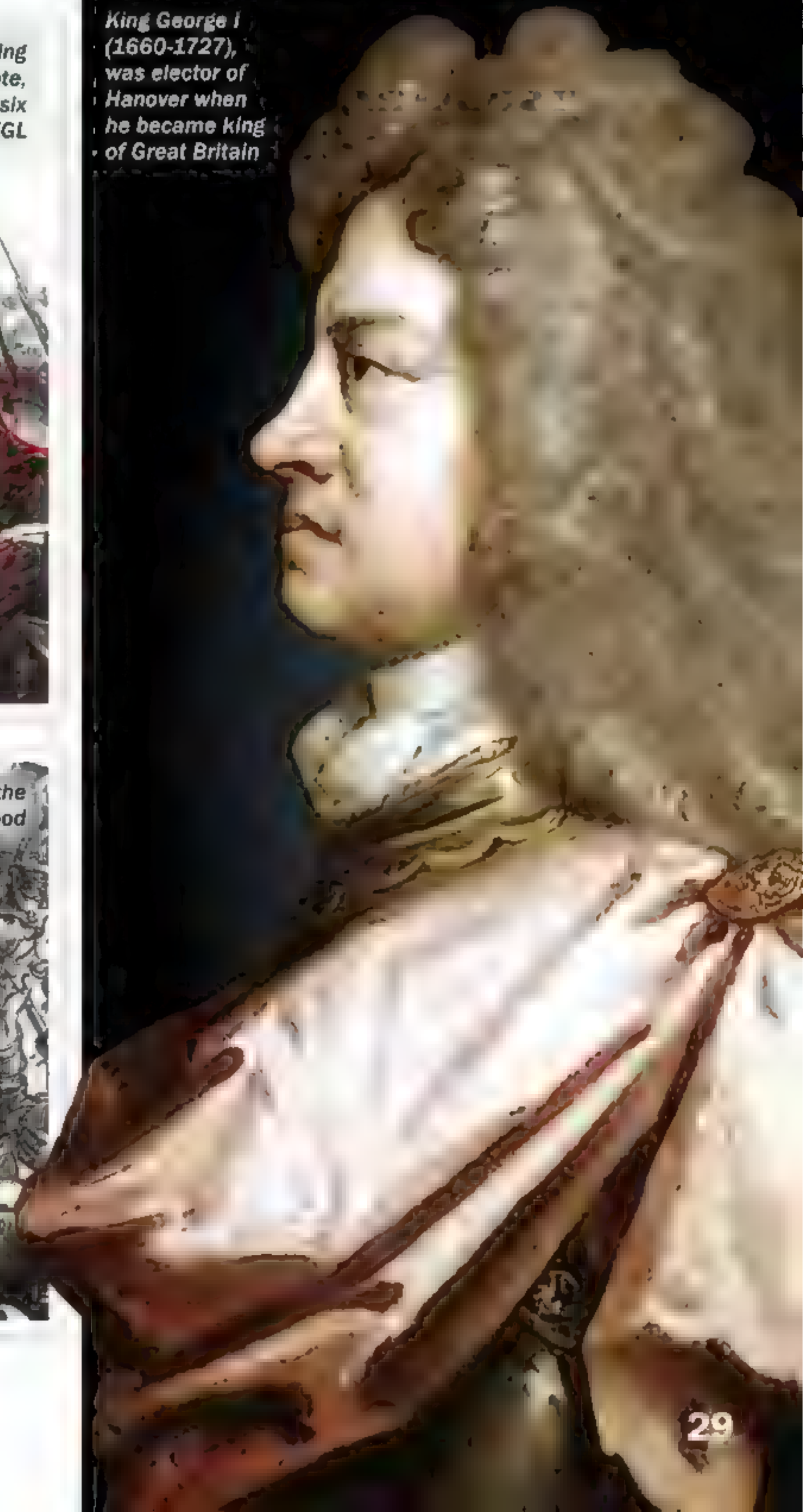
THE KING'S GERMAN LEGION

MEN OF HANOVER FOUGHT UNDER WELLINGTON'S ORDERS

In 1803 the Electorate of Hanover was disbanded by the Convention of Artlenburg. As the French occupied the region, several Hanoverian officers and soldiers retreated to Britain to carry on the struggle against Napoleon. Britain was a logical choice, since George III was also the elector of Hanover. The King's German Legion (KGL) was formally created at the end of the same year by Major Halkett and Colonel von der Decken.

Comprised mostly of expatriate German soldiers, it included cavalry, light infantry and line infantry brigades, as well as artillery and engineering units. During the next years, the KGL served with distinction in Pomerania, Denmark, Spain, Portugal and Italy. At the Battle of Waterloo, almost 6,000 men of the KGL were deployed. The First Brigade, led by Colonel du Plat, was positioned between Hougoumont and Merbe-Braine while the Second Light Battalion fortified the farm of La Haye Sainte, preparing for a difficult but heroic day. Other men of the KGL held different positions along the line. At 3pm the First Brigade was sent by Wellington to prevent the farm from being isolated from the rest of the line. During the following action, Colonel du Plat was killed while his brigade suffered heavy losses.

King George I (1660-1727), was elector of Hanover when he became king of Great Britain





NORTH GATE

CHATEAU

CHAPEL

SOUTH GATE

THE CHATEAU

DETAILED CONTEMPORARY DESCRIPTIONS BRING THE FARM-CASTLE TO LIFE

If the meaning of 'Hougoumont' is still debated by experts, the history of the place is well-known. The building was erected around 1637 by a noble family. During the Hundred Days, the farm-castle was the property of an 86-year-old Austrian officer, Major Philippe Gouret de Louville, who lived in Nivelles. In June 1815 the farm was rented by Antoine Dumonceau while the castle was left unoccupied.

Captain Büggen, who fought with the Second Nassau Regiment at Waterloo, described Hougoumont: "The farm was in

the shape of a long, closed rectangle. The building made up three of the sides and the fourth, on the left, was made up partly by the garden wall and partly by other buildings. This rectangle was divided in two internally by the living accommodation and a wall... Each section had one large gate, the upper facing towards the enemy position, the lower towards their opponents. Joining the farm to the left was a vegetable garden with a wall five to six feet [1.52-1.82 metres] high along its front and left, and a hedge to its rear... Left of the garden was an orchard. The vegetable garden and orchard were not joined, but the latter had a hedge along its front, running along the same line as the wall of the garden." A wood stood south of the farm, hiding Hougoumont from the French side. It also made direct artillery fire impossible.

The site has changed dramatically since 1815. The castle was destroyed during the battle. Other structures, such as the farm and the cowshed near the north gate burned. Three lonely chestnut trees still stand today as sole reminders of the wooded area. A close inspection reveals the damage inflicted by musket balls.

GARDEN

WOODS

Illustration: Rocio Espin

Despite suffering heavy casualties in the empty space separating the wood and the building, the French reached the south gate. They tried to break the door with their muskets but were fired at from the flank. Others tried to climb the garden's wall but were promptly pierced by Nassau bayonets.

Bodies piled up as the French tried to find an entry point. At one moment, a few French soldiers opened the south gate and managed to enter the courtyard. Lieutenant Diederich von Wilder, from Nassau, was chased by a French sapper near the farmhouse. The enemy chopped the officer's hand with his axe, but the south gate was closed and all Frenchmen were killed. The exhausted assailants were finally forced to take cover in the wood.

Strangely, a few witnesses on the French side claimed that the assault had succeeded. Captain Pierre Robinaux presented the first part of the assault on Hougoumont as a victory in his diary: "The corps to which I belonged [Second] headed for the farm of Hougoumont, reinforced and defended by the English. It is located on a small hill overlooking all sides of the field, and at the bottom of this farm there is a large wood below, in which we were walking in tight columns; we were at the extreme left of the army. Count Reille, who was leading the Second Corps, ordered us to take the position occupied by the English, capture the farm and hold this position during the battle, without losing or winning more ground. Immediately, the charge was ordered and we climbed with our bayonets toward the enemy, who opposed us strongly. The combat was fierce on both sides and the shooting was deadly and was carried on with ardour. Thirty minutes were enough for the French to take this formidable position".

Jérôme's stubbornness

The reality on the ground was less simple. General Guillemot, Jérôme's chief-of-staff, wanted to stop the assault, finding it more useful to reinforce the French position in the wood. As General Reille wrote after the battle, he also asked Prince Jérôme to stay put: "The First Brigade went forward and tried to capture the fortified farm instead of keeping the wood by positioning lines of skirmishers. The order was sent several times, but other assaults were launched by other brigades and the division was kept busy there the whole day." Reille's version, despite being criticised by French historians, is plausible. The day before, he had told Napoleon, who was enquiring about the British army, that the Peninsular War had taught him important lessons. He said that Wellington "knows how to position his men. I see English infantrymen as invincible in a

frontal assault, thanks to their tenacity and fire superiority. Before we can fight them with our bayonets, we can expect to lose half our men."

Despite these warnings and the above-mentioned orders, Prince Jérôme tried again to capture the position. He called his second brigade, led by General Soye, to relieve Bauduin's men. With them, he moved towards Hougoumont from the west, exposing his soldiers to British artillery fire. In spite of heavy losses, the French launched an assault on the north side of Hougoumont at 12.00-12.30pm. At that point, 150 light infantrymen and part of the Coldstream light infantry were outside the farm complex. Brutal hand-to-hand combat followed, but the defenders did not break. In the heat of battle, Sergeant Fraser charged a mounted French officer and made him fall from his horse. Colonel de Cubières, the commander of the First Léger, was badly injured but survived the day. Reaching the north gate, a sturdy sous-lieutenant called Legros, known as 'L'enfonneur' (the smasher), grabbed a pioneer's axe to breach the gate's panels. About 30 French soldiers followed him into the courtyard, screaming "Vive l'empereur". Macdonnell, hearing the enemy, rushed with his men before fighting his way to the gates. The brave British officer and Corporal James Graham managed to close the gates, while the daring French who had penetrated the courtyard were slaughtered.

Meanwhile, Wellington noticed Soye's movement toward Hougoumont. Stretched thin, he nonetheless dispatched four companies of the Second Battalion Coldstream Guards and ordered Major Bull's battery to fire at the wood. Reinforcements arrived at 1.00pm, in time to help Nassau soldiers at the orchard wall, now attacked by General Soye and his men. Together with the KGL and Lord Saltoun's soldiers, they fought against French battalions of the 92nd and 93rd line infantry regiments. Lord Saltoun, overwhelmed by superior power, was forced to retreat behind the hedge, where he was assisted by two companies of the Third Scots Guards. At 2.00pm Saltoun launched a counterattack to capture a piece of French artillery. This attempt failed, the French having

"A STURDY SOUS-LIEUTENANT CALLED LEGROS, KNOWN AS 'L'ENFONCEUR' (THE SMASHER), GRABBED A PIONEER'S AXE TO BREACH THE GATE'S PANELS"

The view through a loophole made in the garden wall by Allied soldiers to fire at the French

"I SEE ENGLISH INFANTRYMEN AS INVINCIBLE IN A FRONTAL ASSAULT, THANKS TO THEIR TENACITY AND FIRE SUPERIORITY. BEFORE WE CAN FIGHT THEM WITH OUR BAYONETS, WE CAN EXPECT TO LOSE HALF OUR MEN"

— Honoré Charles Reille

A pistol used by a man of the King's German Legion

just been reinforced by three companies of the Fourth Léger and three companies of the 100th line infantry regiment, led by General Jamin.

It seems that the following anecdote, reported by Sir Horace Seymour, happened at the same point: "Late in the day of the 18th, I was called by some officers of the Third Guards defending Hougoumont, to use my best endeavours to send them musket ammunitions. Soon afterwards I fell in with a private of the wagon train in charge of a tumbril on the crest of the position. I merely pointed to him where he was wanted, when he gallantly started his horses, and drove straight down the hill to the farm, to the gate of which I saw him arrive. He must have lost his horses, as there was a severe fire kept on him. I feel convinced that that man's service the Guards owe their ammunition."

"PRINCE JÉRÔME, WHO WAS MADE AWARE EARLY IN THE BATTLE THAT THERE WAS A FORTIFIED BUILDING, IS PROBABLY TO BLAME FOR THIS POINTLESS WASTE OF LIVES"

Exhaustion and reinforcement

Lord Saltoun, having lost many of his light troops, welcomed the arrival of Colonel Hepburn and the remaining companies of the Third Guards. Having reached the hedge of the orchard, Saltoun left Hepburn in charge while he returned to the position held by the First Guards. Hepburn did not lose time and promptly charged some French soldiers who were trying to penetrate the orchard through a gap at the southwest corner.

Casualties were high on the French side, a fact remembered by Major Jean-Louis Baux in a letter to Soult: "I had no officers anymore, more than 60 had died and I had to promote new ones. Noncommissioned officers acted as captains and, pressed by the circumstances when I had to leave the farm to go forward, I had

to designate new platoon leaders and take them among corporals. How to keep order in such circumstances?" The hedge and the orchard changed hands several times, but the French were systematically forced to give them up.

At around 2.30pm, the castle caught fire for unknown reasons. Wellington, witnessing this, stated, "I see that the fire has communicated from the haystack to the roof of the château. You must however still keep your men in those parts to which the fire does not reach. Take care that no men are lost by the falling in of the roof, or floors. After they have fallen in, occupy the walls inside of the gardens; particularly if it should be possible for the enemy to pass through the embers in the inside of the house." While the smoke bothered the defenders, it did little to help the French.



Almost at the same time – at least according to the British – Bachelu's division launched another doomed assault on the orchard. Both sides were now exhausted. The French were disorganised and left without able commanders, while the British were desperately looking for reinforcements. Ensign Standen remembered, "When we in turn retreated, our attacks became each time feebler. Although we drove them out, our advances became shorter. They fed an immense force of skirmishers; we had no support." At 3.00pm Wellington sent du Plat's brigade of the KGL to stop the French from occupying the hedge. This move was dangerous as it exposed the Germans to French artillery fire. The Hanoverians managed to push back the French from the hedge but were forced to retreat soon after, having lost

Colonel du Plat and many men. At 4.00pm another assault was launched against the orchard from the southeast. The French occupied the orchard but were immediately counter-charged by the Third Guards. A last assault was launched by the French at 6.30pm. They tried to take the orchard but, once again, were driven back. At around the same time, the French were capturing La Haye Sainte. At 7.00pm three battalions of Brunswick soldiers came from the west while the Second Battalion of the KGL and a Landwehr battalion came from the east. They pushed the French entirely from the orchard and wood and were soon followed by the men still holding Hougomont. Together, they rushed forward to counter the Imperial Guard's assault. The battle for Hougomont was over.

Blame and consequences

Historians have debated for years who was responsible for the assault on Hougomont. As discussed above, Napoleon seems to have ignored the presence of a stronghold when launching the battle and had, anyway, ordered the capture of the wood. Prince Jérôme, who was made aware early in the battle that there was a fortified building, is probably to blame for this pointless waste of lives.

Napoleon's brother was not portrayed kindly by his contemporaries. In 1812 the emperor had told General de Caulaincourt that, "Jérôme only liked parties, women, representations and celebrations". A letter written by Jérôme during the Russian campaign, when he was king of Westphalia, betrayed his difficult and moody temper: "I wrote a letter to the emperor, who

A painting by Denis Dighton showing soldiers of the Coldstream Guards repelling a French attack in front of the south gate

"NONCOMMISSIONED OFFICERS ACTED AS CAPTAINS AND, PRESSED BY THE CIRCUMSTANCES WHEN I HAD TO LEAVE THE FARM TO GO FORWARD, I HAD TO DESIGNATE NEW PLATOON LEADERS AND TAKE THEM AMONG CORPORALS. HOW TO KEEP ORDER IN SUCH CIRCUMSTANCES?"

Major Jean-Louis Baux





Fighting in the town of
involved heavy losses
quarter. Around the
opposing forces clashed
around the walls and

must understand that as commander of the right wing, I will never obey anybody".

On another occasion, Jérôme asked Napoleon to put him in charge of the French cavalry, to which the emperor replied, "You are crazy. Why? You think yourself capable of this but you are not even capable of leading a hundred men, of sending a squadron to battle. What a peculiar pretention!" Despite Jérôme's mediocrity, Napoleon gave him responsibilities in 1815. The lack of confidence in the High Command, suspected by many of treason, forced Napoleon to call a member of his family. Jérôme's lack of military abilities was supposed to be counter-balanced by competent staff officers such as Reille and Guilleminot. Unfortunately for the French, they did little to stop the prince in his pointless attempts.

This brief description of Jérôme's character should highlight the fact that Napoleon was seeing Hougoumont as a diversion. Even after the battle, he did not think much of what had happened on his left wing. In his excellent *Waterloo: The French Perspective*, Andrew Field highlighted the fact that Hougoumont got "no mention in [Napoleon's] first report on

the battle" (published in the *Moniteur* on 20 June). The emperor was a good leader who knew perfectly well how incompetent his brother was. He would never have put him in charge of a key point of the battlefield.

Once Napoleon was made aware of what was happening at Hougoumont, he immediately recalled Jérôme, who was left jobless for the rest of the day. Also, an important piece of history was left by Jérôme himself. On 15 July 1815, he wrote the following letter: "At lunch, the army was in formation. I was first on the far-left in front of a wood occupied by the English... At 12.15, I received the order to begin the assault. I marched on the wood, that I took (after fierce fighting), killing many enemy soldiers, but I lost many as well.

"At two, I was master of the entire wood and the battle was engaged along the whole line. But the enemy, understanding how important my position was, came with more men and took it back. I sent the whole division, and at three, after the most bloody battle, took it back. I kept it until the end of the battle. The enemy lost 6,000 men while I suffered 2,000 casualties, including one of my generals and most superior officers.

"Moreover, the men lost on 16 [June 1815, during the battles of Ligny and Quatre Bras] meant that I disposed of only two battalions. I was ordered by the emperor to join him. He welcomed me even more enthusiastically than he had the day before, saying that, 'it was impossible to fight better. Stay with me as you do not have other battalions, go everywhere where there is danger.'"

This letter, written less than a month after the Battle of Waterloo, was full of inexactitudes and omissions. Jérôme was trying to exonerate himself. It should be highlighted that the farm the prince tried to capture again and again was never mentioned in this letter – an attempt to hide the fact that he had ignored Reille's orders. By contrast, he claimed much later in life, when Hougoumont had become

The wooden crucifix with charred feet in the chapel of Hougoumont castle. The legs were stolen but later retrieved

famous, that Napoleon had told him the following: "If Grouchy does not come up or if you do not carry Hougoumont, the battle is decidedly lost – so go – and carry Hougoumont – coûte que coûte." It seems that Jérôme Bonaparte was eager to justify his part of the battle.

British historians often quote the Duke of Wellington's words when highlighting Hougoumont's importance. When asked to award the prize of 500 pounds to the bravest British soldier at Waterloo, Wellington said, "The success of the Battle of Waterloo turned upon the closing of the gates of Hougoumont. These gates were closed in the most courageous manner at the nick of time by Sir James Macdonnell."

Claiming, however, that the day was won there is something of an exaggeration. Napoleon did not make much of Hougoumont during or after the battle. In fact, the diversion was a partial success, as Wellington was forced to send some of his best men to support his right wing.

Many British historians have exaggerated the number of French casualties. According to Andrew Field, about 7,500 men fought at Hougoumont. Maaskamp, a witness, said that 3,000 bodies were found near the farm-castle. Prince Jérôme, as we have seen, talked about 2,000 dead on the French side. He likely underestimated his own casualties and exaggerated British, Belgian, Dutch and German losses. On the Allied side, 3,500 men were involved in the fray.

There is no doubt that this part of the battle was a setback for the French, with lives wasted for no good reason. Orders were ignored, and observations poorly conducted. In fact, Hougoumont could symbolise the state of the French army in 1815. Too many valuable officers had died in Russia and Spain, too many generals had followed Louis XVIII, too many weak links were in charge. The invincible 'grognards', the veterans of Marengo, were no more.

"NAPOLEON WAS SEEING HOUGOUMONT AS A DIVERSION... HE DID NOT THINK MUCH OF WHAT HAD HAPPENED ON HIS LEFT WING"

THE GATES OF HOUGOUMONT

PROJECT HOUGOUMONT RAISED FUNDS TO SAVE AND RESTORE THE ICONIC SITE

Hougoumont farm, just like the surrounding battlefield of Waterloo, has changed dramatically in two centuries. The surviving buildings, all heavily damaged, were restored while most ruins were cleared. Until the end of the 20th century Hougoumont was owned by a noble family and used as a farm. In 2006 the place, in a precarious state, was sold to the self-governing Walloon region. With the bicentennial anniversary of the battle getting closer, Project Hougoumont, a charity, launched a campaign to raise funds and restore the farm. This successful operation allowed the historical site to be preserved. In June 2015 a new memorial showing two soldiers fighting at the gates was unveiled by the Prince of Wales. Numerous other monuments and plaques, for French and British units or officers, can be found in or near the buildings.

A commemorative plaque for French General Pierre-François Bauduin, who was mortally wounded at Hougoumont



Images: Alamy, Chris Collingwood, Getty

THE WEST AFRICA SQUADRON

In 1807 Britain declared war on the slave trade, and a small fleet of Royal Navy ships formed the frontline

In the early hours of 1 February 1829 the Spanish slaver *El Almirante* turned to face the Royal Navy ship that had been pursuing it doggedly for the past 31 hours. Bigger than its opponent and carrying 14 guns as opposed to the British ship's single 18-pounder, the Spanish vessel had every chance of fighting its way to freedom. The fate of the 466 slaves on board

El Almirante hung in the balance, as HMS *Black Joke* closed in under unusually calm weather conditions, resorting to oars to get within range of its prey.

A short, fierce firefight broke out, and over the course of 80 minutes *El Almirante* suffered 28 casualties, including the death of its captain. The Spanish ship had become another victim of one of the West Africa Squadron's

most effective ships, which was somewhat ironic – the *Black Joke* had started life as a slaver, and its speed had originally been intended to evade the British vessels aiming to stamp out the slave trade.

Abolition and war

Britain's decision to abolish slavery has been described as "the most expensive

Sir George Ralph Collier, the first commodore of the West Africa Squadron

"BRITAIN'S DECISION TO ABOLISH SLAVERY HAS BEEN DESCRIBED AS 'THE MOST EXPENSIVE INTERNATIONAL MORAL EFFORT IN MODERN WORLD HISTORY'"

HMS *Black Joke* (left) engages the Spanish slaver *El Almirante*, capturing the ship and freeing the 466 slaves on board

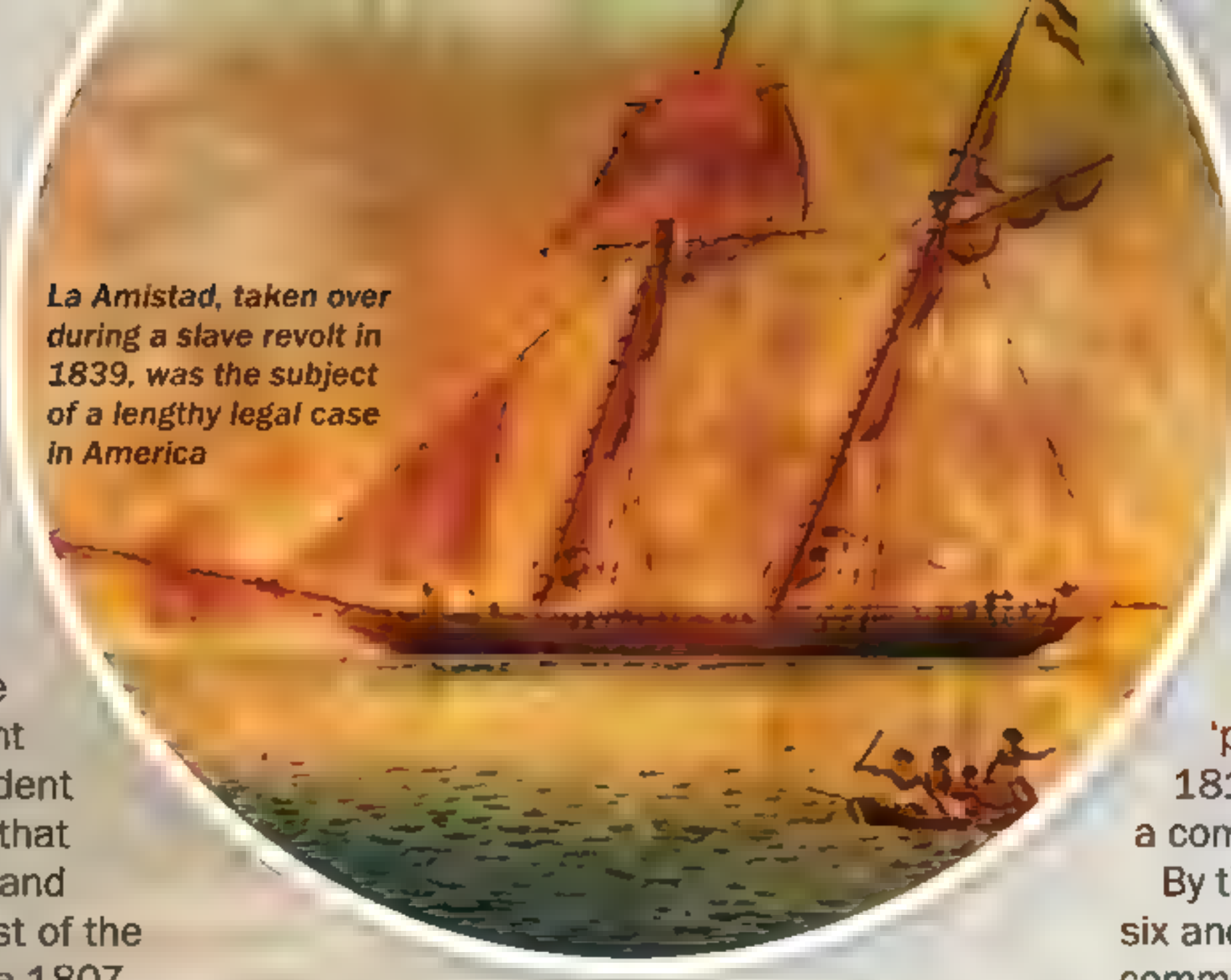


THE WEST AFRICA SQUADRON

international moral effort in modern world history". It came at the end of an era in which British ships had carried more than half of the slaves taken from Africa's west coast, transporting them to the British West Indies, the United States and destinations in South America. Britain's sugar-producing colonies in the West Indies, which produced 55 per cent of the world's sugar, were totally dependent on slave labour. It's little wonder, then, that when Britain passed two acts, in 1806 and 1807, to abolish the slave trade, the rest of the world was suspicious of its motives. The 1807 act made it illegal for slaves to be imported to British West Indian colonies, banned British citizens from involvement in the trade and forbade British ports from accepting foreign slave ships.

Britain was not the first European power to ban the trade – Denmark had done so in 1792 and revolutionary France had briefly outlawed it in 1794, only to reinstate it in 1802 under Napoleon (which did much to invigorate the anti-

La Amistad, taken over during a slave revolt in 1839, was the subject of a lengthy legal case in America



slavery movement in Britain). Neither Denmark nor France, however, were in a position to make as much impact as Britain.

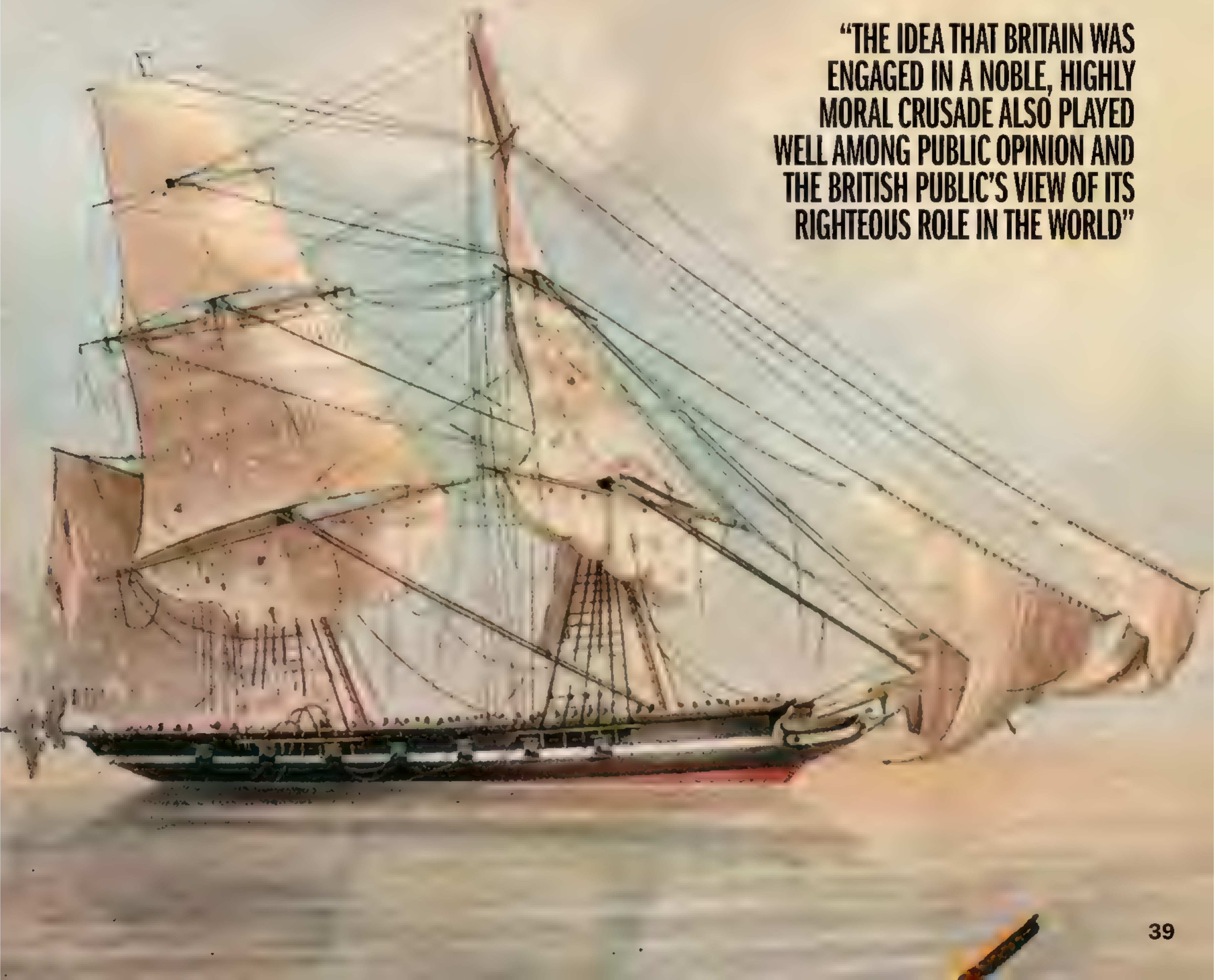
When Britain unilaterally abolished the slave trade, war in Europe had been raging for years, first against the forces of revolutionary France and then Napoleon. With the navy therefore engaged in a major conflict, when the decision was made to first send ships to

patrol the west coast of Africa for slavers it was a pathetically small force. The frigate HMS Solebay and sloop HMS Derwent were all that could be spared by a navy straining to maintain control of the seaways of Europe. This two-ship force was not yet the famed West Africa Squadron – the ships were classed as being on 'particular service' and it was not until 1819 that an independent command, under a commodore, was established.

By then the number of ships had risen to six and Sir George Collier became the first commodore of the West Africa Squadron. An experienced seaman, having fought in the Napoleonic Wars and the War of 1812 against the United States, his flagship was the 36-gun HMS Creole.

The size of the squadron fluctuated over the half-century of its existence, hitting a peak of 30 in 1847, but was more usually somewhere in the teens. It was never enough to effectively patrol the vast area that encompassed the slave routes, but some help came in 1841,

"THE IDEA THAT BRITAIN WAS ENGAGED IN A NOBLE, HIGHLY MORAL CRUSADE ALSO PLAYED WELL AMONG PUBLIC OPINION AND THE BRITISH PUBLIC'S VIEW OF ITS RIGHTEOUS ROLE IN THE WORLD"



when HMS Pluto joined the squadron, armed with up to four guns. It was the first paddle steamer to take part in patrols and could maintain a high speed under calm conditions and steam up inlets and rivers, making it an effective pursuit vessel. By 1852 there were ten steamers on station.

The ships of the squadron were generally a far cry from the heavily armed men-of-war that made up the front line of the Royal Navy. Anti-slavery work was more a matter of speed, but the activities of the patrols still captured the imagination of the British public. Stirring tales of pursuits and battles with slavers found their way into the newspapers and were immortalised in oil paintings. The idea that Britain was engaged in a noble, highly moral crusade also played well among public opinion and the British public's view of its righteous role in the world.

A resilient trade

The fact remained that, with such a small number of ships, little impression could be made on the slave trade. Diplomacy had to be employed as well and was arguably more effective. During the Congress of Vienna, which began in November 1814, the map of post-war

Europe was redrawn (Napoleon's brief reappearance and defeat at Waterloo ultimately made little impact on the negotiations).

Britain's representative, Viscount Castlereagh, was determined to also secure declarations of support for Britain's anti-slavery stance. His counterparts from the other powers at the congress commented that he was sometimes hamstrung in negotiations because of his insistence on pushing through anti-slavery measures, although Castlereagh himself referred to it as "a rather minor detail". His efforts bore fruit – France agreed to abolish the slave trade within five years, while Spain and Portugal made less definitive promises to move towards abolition.

Despite this, slave ships could easily switch their flag to that of a nation that still supported the trade, and many of them were sleeker and faster than the often old and battered Royal Navy ships that patrolled against them.

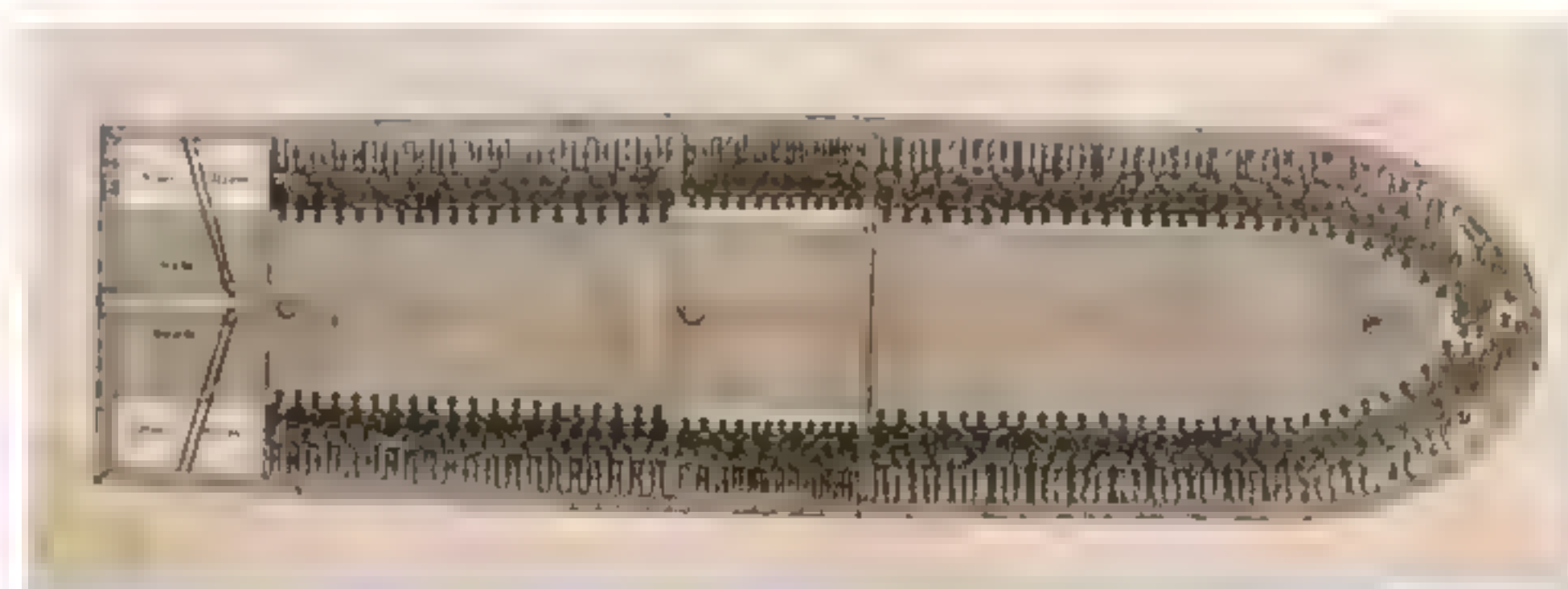
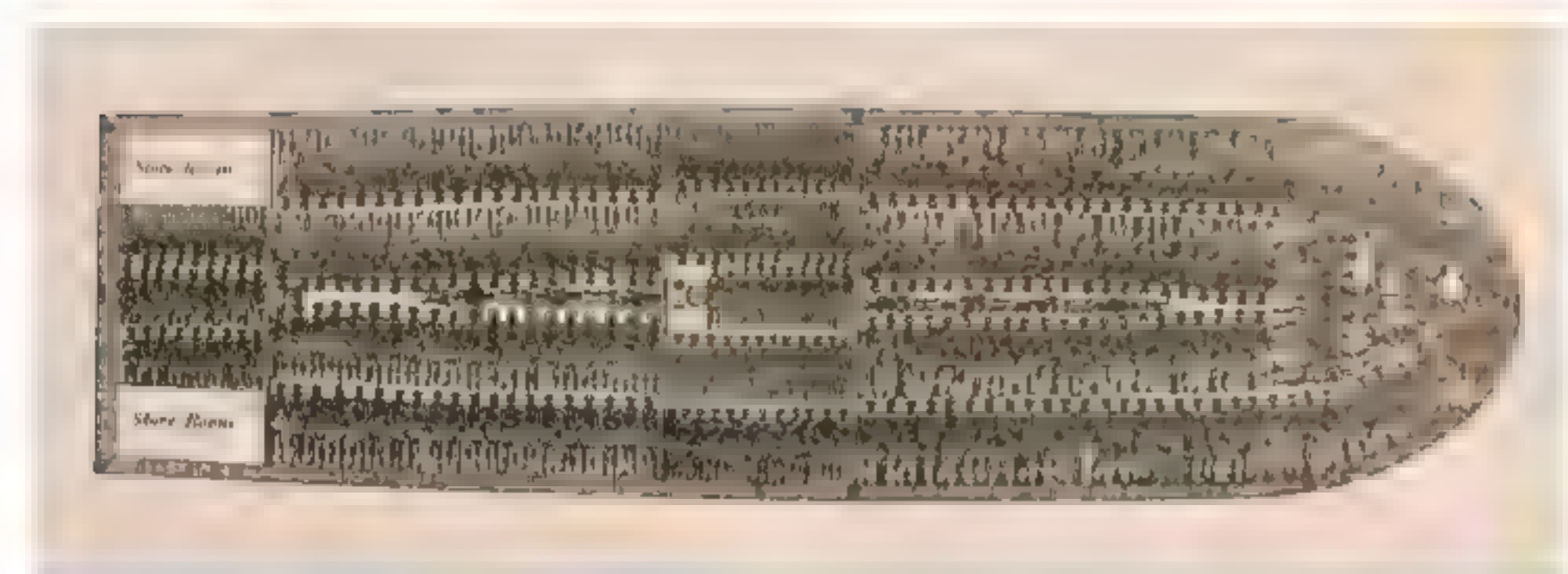
The economic imperative also ensured that slavery remained very much an active business. A steep decline in Britain's share of the sugar market was down to the fact that slave labour enabled cheaper production, and



Above: Leopold Heath (pictured as an admiral in 1873), took part in the attack on Lagos and later served on the east coast of Africa

British plantations could no longer compete on a level playing field. There were plenty of nations willing to fill the gap.

Between 1811 and 1850 an average of half a million slaves were transported across the Atlantic every decade and, until rules were tightened, a slaver in danger of being captured could simply jettison its cargo of living people



A depiction of the interior of a slave ship by a German artist, M. R. 1848

Above: These diagrams of the British slave ship Brookes show how slaves were crammed into transport, sometimes leading to death by suffocation

"SLAVE SHIPS COULD EASILY SWITCH THEIR FLAG TO THAT OF A NATION THAT STILL SUPPORTED THE TRADE, AND MANY OF THEM WERE SLEEKER AND FASTER THAN THE ROYAL NAVY SHIPS"

to avoid seizure. Against this, the West Africa Squadron liberated an estimated 150,000 slaves over the five decades of its existence.

Against the odds, the squadron doggedly pursued its mission and scored some notable successes. Encounters had an unusually personal touch – rather than fleets engaging, as had often been the case during the Napoleonic Wars, these were single-ship clashes with all the glamour of a prize fight. Pickle versus Voladora, Buzzard versus Formidable and Acorn versus Gabriel were contests that fired the public imagination. The reality of life on

the West Africa station, riven with disease, blighted by boredom and often marked by the frustration of simply being unable to catch the speedy slave ships, was in marked contrast to the excitement that played out in the pages of the popular press, but public support was important if the effort was to be maintained.

Gunboat diplomacy

The reluctance of many powers to do more than talk about ending the slave trade and the outright refusal of many others to do even that left Britain in a quandary. There were limits to the level of persuasion and coercion that could be applied to powerful nations such as France and the United States.

The case was very different with African peoples who refused to toe the line. Punitive raids could be mounted in the coastal regions of West Africa to bring rebellious leaders to heel. In 1850 the Zaro, living near Sierra Leone, struck out against the British decree, declaring war on neighbouring peoples who had agreed to end their trade in slaves. The six-gun brig HMS Heroine, patrolling the shoreline near the Gallinas River, dispatched a tiny expeditionary force of sailors and marines to deal with the situation. Together with men from allied tribes,

they hunted down a Zaro raiding party and obliterated it at the small town of Siman.

The following year a larger expedition was mounted against the oba (king) of Lagos. Britain had decided to try its familiar (and often successful) colonial tactic of pitting rival tribal leaders against each other by threatening to support Oba Kosoko's enemies if he did not agree to suspend his slave-trading. This was in essence merely a pretext for asserting British dominance in the region. The message was to be delivered by a diplomat, John Beecroft, but would have the weight of the West Africa Squadron behind it.

No fewer than five Royal Navy ships had gathered off the coast, providing the men for a formidable expedition. It approached Kosoko's stronghold under cover of a white flag, but the show of strength was provocative. A fleet of 22 small boats carrying around 300 sailors, marines and West African 'Kroomen' (experienced and respected sailors from the Kru coast), descended on Lagos and were met with ferocious resistance. The landing quickly became a debacle and the British were forced to withdraw.

Kosoko was then threatened with a naval bombardment if he refused to surrender, a

THE ATLANTIC SLAVE TRADE

SHIPS OF THE WEST AFRICA SQUADRON HAD AN ENORMOUS AREA OF COASTLINE TO PATROL AND AN EVEN VASTER OCEAN BEYOND THAT

THE BRITISH WEST INDIES

Slavery was a vital component of the sugar plantations in the British West Indies, and the abolition of slavery greatly reduced Britain's share of the global sugar market.

SIERRA LEONE

An experimental colony set up in the aftermath of the American War of Independence, Sierra Leone became an official Crown colony in 1808. Its capital Freetown became an important naval base in the fight against slavery, and many liberated slaves chose to settle in the area.

CUBA

Havana was an important port in the slave trade and was the destination of the El Almirante when she was intercepted and run down by the converted slaver Black Joke in 1829.

THE REDUCTION OF LAGOS

The site of power for the rebellious Oba Kosoko, Lagos was bombarded by British forces at the end of 1851. The deposed king was able to escape and even returned in 1861, after the annexation of Lagos.

THE SLAVE COAST

As with the Gold Coast and the Ivory Coast, this region was named after its principal export. Focused on the Bight (or Bay) of Benin, an estimated 2-3 million slaves were transported from the region before the slave trade was finally stamped out.

ANGOLA

A prolific area in the slave trade, slaves from this region were transported to the West Indies as well as North and South America. An estimated 37 per cent of slaves in North America originated in Angola.

"FREETOWN BECAME AN IMPORTANT NAVAL BASE IN THE FIGHT AGAINST SLAVERY, AND MANY LIBERATED SLAVES CHOSE TO SETTLE IN THE AREA"

threat that was carried out on 26 December 1851. Kosoko was forced to flee two days later and the following month his replacement, Oba Akitoye, signed a treaty with Britain to end the slave trade in the region.

The tide turns

Such strong-arm tactics could not work with the major powers, but gradually global opinion shifted against slavery. France emancipated its slaves in 1848, Brazil began enforcing its own ban by 1850 and Cuba followed suit in 1867, while a protracted and bloody civil war put an end to the 'peculiar institution' of slavery in the United States. America had contributed its own 'Africa Squadron' to the fight against the trade, but it had enjoyed far less success than its British counterpart, and the potential benefit of cooperation with British ships was never exploited to improve the outcome.

Despite the success of the West Africa Squadron and the glamorisation of its activities in the papers, it remained one of the least popular postings in the Royal Navy. The mortality rate was 55 out of every 1,000 men – more than five times the rate of a crew serving in healthier climates closer to home.

Britain's commitment had proved remarkable – and costly. From its control of 55 per cent of the global sugar market prior to the ban, Britain's share had dropped to just 15 per cent by 1850. Around 5,000 British sailors and soldiers died attempting to enforce the ban, with casualties mostly attributable to the unhealthy conditions in the areas patrolled. Land-based garrisons at locations such as Sierra Leone suffered most in this regard.

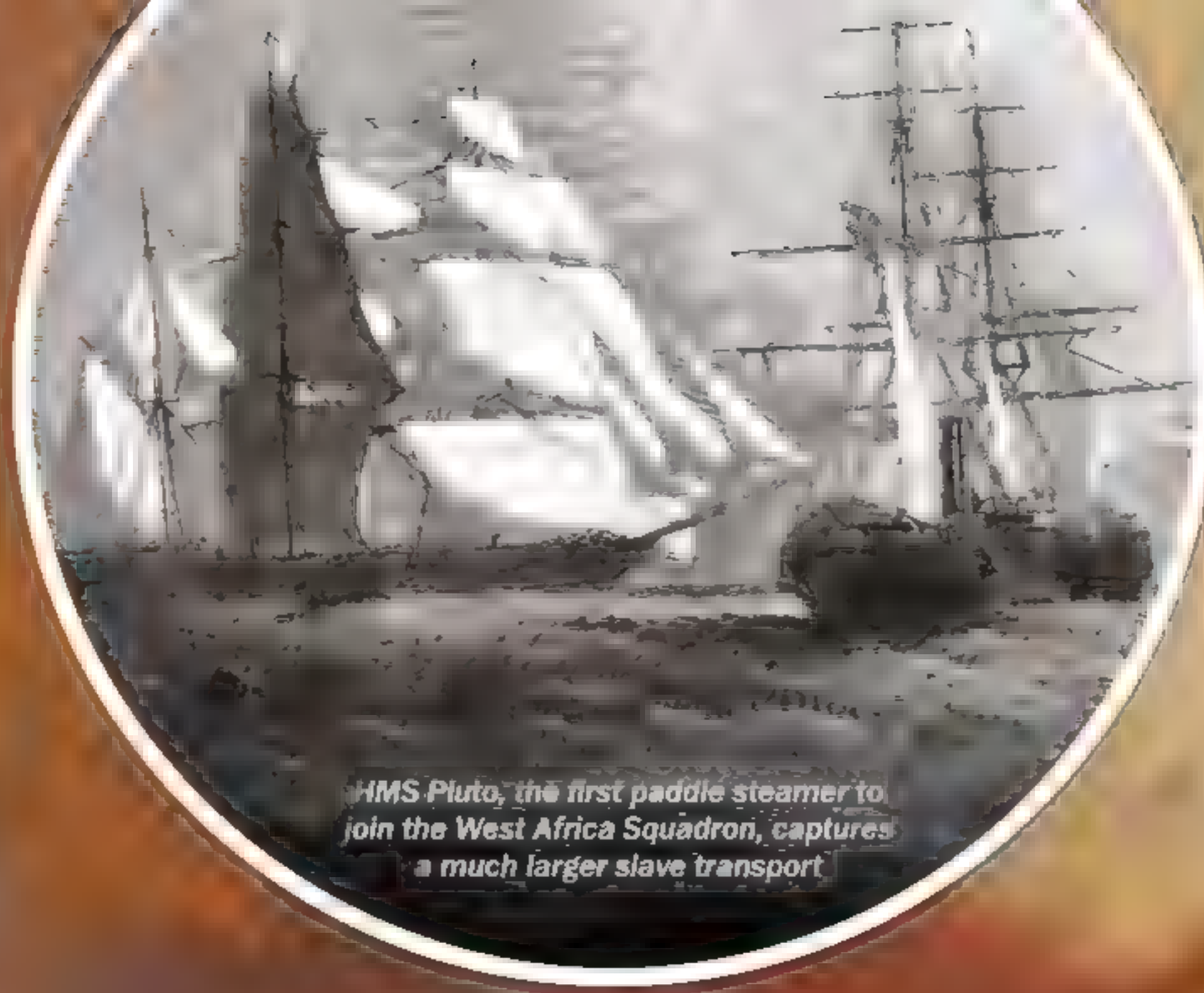
Around 1.8 per cent of British national income was lost every year for 60 years, and the ban antagonised many of the world's other powers, sometimes almost leading to hostilities. War had briefly flared up between Britain and Brazil in 1850, and tensions with France had reached a critical level over the right of Royal Navy ships to search French vessels. Despite the cost to the anti-slavery effort, the right was suspended in 1845 to avert war.

The West Africa Squadron had played its part as well as it could, capturing around 1,600 ships and making the trans-Atlantic routes a more perilous crossing for slavers. However, Britain's commitment was not yet over. Even after the slave trade had been crippled on Africa's west coast, it continued on the east. A separate effort would be mounted there, with many of the men who had cut their teeth in the West Africa Squadron leading the way.



Freetown is the capital of Sierra Leone and was an important naval base for the West Africa Squadron

Images: Alamy, Getty



HMS Pluto, the first paddle steamer to join the West Africa Squadron, captures a much larger slave transport

First displayed in 1840, Turner's 'The Slave Ship' captured the horror of a slave cargo being dumped overboard

“THE MORTALITY RATE WAS 55 OUT OF EVERY 1,000 MEN – MORE THAN FIVE TIMES THE RATE OF A CREW SERVING IN HEALTHIER CLIMATES CLOSER TO HOME”

**"AN ARMY WAS TO BE SENT TO THE EAST,
AND, AS PART OF THAT ARMY, THREE
BATTALIONS OF BRITISH GUARDS WERE
TO FORM WHAT WOULD BE CALLED THE
GUARDS BRIGADE"**



**Guardsmen with the Colours at
Inkermann. The Guards lost 538 men
killed or wounded during the battle**



A colourised photograph of William McGregor, a colour-sergeant of the Scots Fusilier Guards, who is wearing the Crimea Medal

THE EMPIRE'S SCARLET HEROES

Three battalions of British Guards found themselves thrown into the horrors of the Crimean War. Bloodied in battle and ravaged by disease, the gallant Guardsmen tell their own story

WORDS MARK SIMMONS

On 20 September 1854 James McKechnie, a 28-year-old sergeant of the Scots Fusilier Guards, had just committed an act of valour that would see him become one of the very first recipients of the Victoria Cross. During a moment of dangerous disorder for his battalion at the Battle of the Alma, he took the initiative and rallied his men around the Colours, and was wounded in the process. So bitter was the fighting that McKechnie would be just one of 12 Guardsmen to receive the VC during the costly Crimean War.

Earlier that same year, on 10 February, a brigade order was issued in anticipation of war with Russia. An army was to be sent to the east, and, as part of that army, three battalions of British Guards were to form what would be called the Guards Brigade. These included the Third Battalion Grenadier Guards, the First Battalion Coldstream Guards, and the First Battalion Scots Fusilier Guards.

All three battalions, which would number the best part of 1,000 officers and men each, were expected to embark on their transports at Southampton on 18 February, although in the event they would not set sail until later in the month. Their destination was to be the Dardanelles, after briefly disembarking at Malta en route.

During the voyage to the Mediterranean island, Captain Alfred Tipping of the Grenadier Guards, who

was not usually prone to seasickness, described his sea journey aboard the transport *Manilla* as a somewhat rough one: "The Wind blew hard against us, with a heavy sea, of course everyone was now more or less sick ... I always find myself nearly the only one on board, who does not suffer, when it is at all rough, but with seeing so many ill all around, I must say I was nearly being upset myself."

When his battalion disembarked from the transport *Orinoco* on 5 March, Captain Charles Wilson of the Coldstream Guards was pleased to find Malta was not riddled with disease and sickness as some had feared: "The Lazzaretto, and forts adjacent, were the quarters assigned to the Guards ... the quarantine harbour being cool lounging places, whence you get a charming view of the churches, convents, batteries, and palaces of which the Maltese metropolis [Valletta] is made up." He went on to say, "Europe has no prettier town than Valletta" and "the fair sex is the first object of the British officer's attention".

Charming and entertaining as it was, the Guards' stay in Malta would be a short one, for on 24 April they re-embarked on their allocated transports for the final leg of the journey to the Dardanelles, arriving at Scutari five days later and making camp at the little village of Kadikoi. While at Scutari the inefficiencies of the British Army, which would later be such a prominent feature of the Crimean War, quickly became apparent. Wilson recorded, "The utter

insufficiency of means of land-transport greatly perplexed the authorities, and judging from the ever-varying complexion of the memorandums, orders, and notifications on the subject... it was unlikely a satisfactory solution of the problem would be promptly reached."

A brief move to Bulgaria followed on 13 June, when the Guardsmen embarked on their transports to Varna, where they made camp outside the city the following day. July and August saw the Guards Brigade conduct a number of marches, and this period of relative inactivity must have made some of the men believe that war was now becoming unlikely. However, on 29 August the Guardsmen embarked on their transports once more: this time they would be sailing for the Crimea. Tipping, Wilson and thousands of other Guardsmen were about to be thrown into the horrors of the Crimean War.

Invasion

The Grenadier Guards made their way to the Crimea aboard the transport *Simoon*, while the Coldstream Guards were split between the *Simoon* and *Tonning*. The Scots Fusilier Guards, meanwhile, found themselves crammed aboard the *Kangaroo*.

Without any reliable maps to assist them, the British had taken the decision to land the army at Kalamita Bay, where they disembarked on 14 September without encountering any resistance from the Russians. Once ashore, the Guards Brigade, along with the rest of the army, marched five kilometres (three miles) inland and bivouacked.

No land transport of any quantity had been provided for the British troops. It had, wrongly as it turned out, been assumed that horses

and other baggage animals would be procured in the Crimea itself. As a result, most of the Guardsmen were forced to leave their packs on the sea transports, and instead they rolled essential items in their blankets, which they then slung across their shoulders and chests.

With no available change of clothing, over the next few months the Guardsmen became dirty and infested with lice. To add insult to injury, when the men were able to get their packs back they found that they had been rifled through and many items were missing. Tipping complained of the lack of provisions for him and his men: "On the first day of landing we procured some fowls from the country people; however the French have been before us, and ransacked every cottage for food, so we shall get no more here."

There was little time, however, to worry about missing packs and lack of provisions, for orders to march towards the Alma River were soon given. The Guards Brigade formed part of the First Division, under the command of H.R.H. the Duke of Cambridge, which advanced behind the Light Division. During the march, many men of the British Army became victim of the dreaded disease cholera. Wilson remembered the horrors suffered during the advance before the first shot of the campaign had even been fired: "We had invaded an enemy's country without means of transporting the sick and wounded beyond a few 'stretchers' in the hands of bandmen and drum-boys! The sick and wounded of 27,000 British soldiers were to

be carried bodily over burning steppes, where water was not."

The sufferings of the Guardsmen, however, would quickly become a secondary concern when, at last, the enemy was encountered. Lieutenant Colonel Sir John Ross-of-Bladensburg, author of *The Coldstream Guards in the Crimea*, noted, "In the afternoon the attention of the troops was diverted from these scenes of suffering; shots were heard in the front... however, the firing proved but a skirmish; for, after the expenditure of a few rounds, the Russians... moved back."

An order to bivouac for the night was received, but the next day the Guardsmen would fight their first major action of the war.

First blood

The Battle of the Alma took place on 20 September 1854. A number of vivid accounts were penned in the days following the action, including some by men of the Guards Brigade. Tipping described the moment during the initial advance of the brigade when he first saw the long-awaited enemy: "We could plainly see thousands of bayonets, glistening in the sun's rays on the top of the hill [overlooking the village of Alma], and crowning some rising ground on the highest point of which was an unfinished building, which was evidently surrounded by a mass of troops."

After a temporary halt of about half an hour, the Grenadier Guards recommenced their advance, during which dense smoke could be

"AS THE MEN SAW THEM APPROACHING, THEY OPENED THEIR RANKS, AND THE BALLS WENT HISSING PAST IN THEIR RESISTLESS FORCE"





seen rising above the village of Alma. Tipping continued his description of the beginning of the battle: "The further we proceeded, and the heavier became the roar of the cannon, and the great ponderous round shot came bounding along the ground like cricket balls. As the men saw them approaching, they opened their ranks, and the balls went hissing past in their resistless force."

Also present at the battle was Wilson, who recorded the advance of the brigade from the point of view of the Coldstream Guards: "Suddenly, just as we reached the gardens bordering the Alma, a murderous storm of round shot and shell broke upon us; we crouched for a few moments behind the embankments of the vineyard, but the virulence of that diabolic artillery was no short livid spurt; so onwards, through thick and thin."

Pushing their way up the heights, the Guardsmen struggled to push their way through the vineyard, which was interspersed with fruit trees and intersected by ditches. Wilson continued, "We are in a very hell [with] nothing

to be heard, save the humming of shells, the whiz of round-shot, the rattle of grape and canister. The trees crash and split around, the ground is torn up under our feet, our comrades are beaten down."

Meanwhile, Captain Hugh Drummond of the Scots Fusilier Guards witnessed what he later described as an astonishing sight: "The Light Division had crossed just before us, and we were scrambling out of the river under the bank, not yet quite formed, when to our astonishment they, the Light Division... formed squares in front of us, and began to retire, for just in front of us was such a battery as none of us expected".

Despite this shocking revelation, the commander of the Guards Brigade, Sir Henry Bentinck, ordered the Scots Fusilier Guards to support the Light Division. Drummond remembered what happened next: "We blazed into them [the Russians] with our Minies and marched on straight to the entrenchment under

Above: The Third Battalion Grenadier Guards depart London for their journey to the Dardanelles and the Crimean War

The Guards Brigade lands at Old Fort, Kalamita Bay during the Allied invasion of Crimea, 14 September 1854



BATTALIONS AT THE FRONT

THE GUARDS BRIGADE SENT TO CRIMEA CONSISTED OF THE THIRD GRENADIER GUARDS, FIRST COLDSTREAM GUARDS AND FIRST SCOTS FUSILIER GUARDS

GRENADIER GUARDS

**HONI SOIT QUI MAL
Y PENSE (EVIL BE
TO HIM WHO EVIL
THINKS)**

Able to trace its lineage to 1656, the Third Battalion of the Grenadier Guards deployed to the Crimea in September 1854. The 3rd battalion took part in the Battles of the Alma and Inkerman, and the Siege of Sevastopol. In recent years, the regiment has seen service in Iraq and Afghanistan.



COLDSTREAM GUARDS

**NULLI SECUNDUS
(SECOND TO NONE)**

The oldest regiment in the regular British Army with continuous service, the First Battalion of the Coldstream Guards is able to trace its origins back to the English Civil War. In 2010 members of the regiment played a major role in Operation Moshtarak in Afghanistan.



**"THE FIRST BATTALION OF THE
COLDSTREAM GUARDS IS ABLE TO
TRACE ITS ORIGINS BACK TO THE
ENGLISH CIVIL WAR"**

SCOTS GUARDS

**NEMO ME IMPUNE
LACESSIT (NO
ONE PROVOKES
ME WITH
IMPUNITY)**

Known as the Scots Fusilier Guards at the time of the Crimean War, the regiment currently boasts 93 battle honours and 11 Victoria Crosses. Recently it has seen service in Iraq and Afghanistan.



GUARDS OF HONOUR

12 GUARDSMEN RECEIVED THE VICTORIA CROSS DURING THE CRIMEAN WAR, BEING AMONG THE EARLIEST RECIPIENTS OF THE NEWLY INSTITUTED AWARD

Of the 12 VCs awarded to men of the Guards Brigade during the Crimean War, four went to the Grenadier Guards, three to the Coldstream Guards and five to the Scots Fusilier Guards. Four were awarded for actions at the Battle of the Alma, five for the Battle of Inkerman and three for the Siege of Sevastopol.

Lieutenant Colonel Henry Percy of the Grenadier Guards received his VC for Inkerman, when he and his men became surrounded and without ammunition. His citation stated, "Colonel Percy, by his knowledge of the ground, although wounded, extricated these men, and, passing under a heavy fire from the Russians then in the Sandbag Battery, brought them safe to where ammunition was to be obtained, thereby saving some 50 men and enabling them to renew the combat."

Another VC for the Battle of Inkerman was that awarded to Major Gerald Goodlake of the Coldstream Guards. He was in command of a party of sharpshooters holding Windmill Ravine when he came up against a larger force of Russian soldiers. Here it was reported that he and his men "killed thirty-eight (one an officer) and took three prisoners." He also showed "distinguished gallantry" when his sharpshooters surprised a picquet and "the knapsacks and rifles of the enemy's party fell into his hands".

One of the VCs to the Scots Fusilier Guards went to Captain Robert Lloyd-Lindsay. When the line of his regiment became disordered he "stood firm with the Colours, and by his example and energy, greatly tended to restore order."

"WHEN THE LINE OF HIS REGIMENT BECAME DISORDERED HE 'STOOD FIRM WITH THE COLOURS, AND BY HIS EXAMPLE AND ENERGY, GREATLY TENDED TO RESTORE ORDER'"



Major Gerald Goodlake VC, Coldstream Guards



such a fire, and got half way up, and in another minute should have been in the place, when the remains of the 7th, 23rd and 33rd [of the Light Division]... retired... right through our battalion, and regularly swept part of our right wing away... and then we had a desperate fight."

The Russians attempted to drive the Scots Fusilier Guards off, but the Grenadier Guards soon appeared on the right of Drummond's battalion, while the Coldstream Guards similarly arrived on the left. There had been some confusion when an order was repeatedly given for the Guards to retire, but it was quickly realised to have been a mistake, and the advance resumed.

Drummond recalled the moment the Guards inflicted great destruction upon the Russians: "We poured in such volleys as astonished their weak minds, killing and wounding hundreds; in the meantime the Highland brigade in line to our left brought their shoulders up by battalions in echelon, and their firing on the flank was quite beautiful. The enemy retreated in disorder".

The Battle of the Alma ended in Allied victory over the Russians, although the outcome owed more to the determination and bravery of the soldiers, particularly the Guardsmen, rather than the skill of their generals.

The soldiers' battle

On 5 November the men of the Guards Brigade would fight their next major action of the war at a place called Inkerman. Again it would be a 'soldiers' battle', in which the Guards Brigade would play a prominent part.

Colonel Edward Reynardson, who commanded the Third Grenadier Guards, recalled the moment his battalion went into action: "When we got to the scene of the action, which was about an hour after it commenced, we were under a very severe fire of shells and some shot from the overwhelming force of Russian artillery and as we had not got into position, they were doing mischief on crowning the height."

"THE OUTCOME OWED MORE TO THE DETERMINATION AND BRAVERY OF THE SOLDIERS, PARTICULARLY THE GUARDSMEN, RATHER THAN THE SKILL OF THEIR GENERALS"

In front of Reynardson was a British redoubt that had been taken by the Russians, who subsequently stationed within it a large body of men in order to defend it. As the Grenadier Guards advanced, these Russians poured a heavy fire into the ranks of the oncoming Guardsmen. Nevertheless, Reynardson and his men pushed on and took the redoubt back, suffering much loss as they did so.

According to Reynardson, who had had his charger shot from under him, the battle soon began to turn against the Grenadier Guards: "We were pretty much well left to ourselves. Once from the overwhelming forces of Russians and their turning our flank from such insufficiency of support, we were obliged to retire behind the breastwork and the redoubt was retaken by the Russians."

Nevertheless, the Grenadier Guards fought back, delivering a sharp fire into the Russian ranks, and when their ammunition began to run out they pelted their enemy with stones. Eventually, the Russians withdrew down the hill, and Reynardson ordered his men to conduct a bayonet charge but not to go down the hill after them. Unfortunately, some of the Guardsmen, flushed with success, charged too far and the Russians once again almost outflanked the British soldiers. Reynardson next ordered a retirement, taking up new positions behind a breastwork in the hope of replenishing his battalion's ammunition.

Captain George Higginson, the adjutant of the Third Grenadier Guards, wrote a description of what happened next: "I looked at the Colours I thought for the last time and I believe everyone down to the private soldiers thought that the poor old 3rd Battalion was doomed... Not a round of ammunition was left and we were being peppered on three sides."

At this moment of doom the fortunes of the Guardsmen suddenly turned in their favour, through a mix of bravery and determination. Higginson continued, "Sticking close to the Colours ... the men went up the hill at the charge and literally charged home a distance of not less than 1/4 of a mile [0.4 kilometres] to the upper redoubt. God alone knows how thankful we were when we sprang through the embrasures and fell utterly exhausted in this secure rallying place."

As the battle entered its next phase, the Guards Brigade would find their French allies coming to their assistance. Captain Wilson of the Coldstream Guards thought he and his men were "in for it", when, almost out of the blue, "Hark, the pas de charge! The toll of fifty drums! The bray of fifty clarions! We're saved! We're saved! See, clouds of Zouaves, and Algerians! ... As they come bounding towards us, we flourish our muskets with rapture in the air. We cry 'Thank God!'" The Guardsmen then renewed their attack, assisted by the French, shooting, stabbing, bludgeoning and trampling over the Russians. Wilson described this moment in the action as a "slaughter house", with little mercy shown towards their enemy.

As the battle dragged on, things again began to turn and looked desperate for the Allies. However, the turning point in the action came when further reinforcements finally arrived. Wilson again remembered, "With reinforcements came recoil. Although the Muscovites were over and over again rallied, and brought to the scratch by their brave officers, they no longer made headway, nay, they lost ground every minute."

The Scots Fusilier Guards in action during the Battle of the Alma, 20 September 1854



Eventually the Russians began to fall back, and a general retreat followed. The Allied victory, however, came at a price. Among the Guards Brigade some 538 men had been lost – almost half the number of their men who had engaged in the battle.

Drummond, in a letter to his family, wrote of the slaughter: “It was a very stiff fight, we had to repel four separate attacks, each time with fresh men, before we got reinforcements up. Our loss is terrible! Irreparable! Nine of the Coldstream [officers] killed; we have eight [more] wounded.”

A harsh winter

Much has been written about the harsh Crimean winter of 1854-55. The British soldiers suffered in particular, due to their terrible lack of winter clothing and other vital supplies. There was a shortage of fuel too, and sickness quickly set in among the soldiers. The men of the Guards Brigade were no exception to this awful situation.

In November a great storm sunk some 30 Allied ships, many of them carrying much needed supplies. Captain Drummond recalled his experience of the storm when he was aboard the *Retribution*, recovering from wounds he had received in battle: “A fearful storm

began in the morning [14 November], and raged all day. We parted two cables out of three, and drifted from where we were originally anchored, half a mile [0.8 kilometres] out to sea... hanging by one cable; our guns thrown overboard; green seas washing all over; our yard struck by lightning.”

The loss of precious winter supplies and the deteriorating weather conditions quickly took its toll on the army on land. Early in the New Year, Drummond witnessed the sorry state of the men: “Our army is in a desperate state, not a man hutted, and hardly any warm clothes issued, and a foot of snow on the ground. Ships, full of huts and warm clothing, are at Balaclava, but nothing finds its way up to camp; there is no means of transport.”

Even Lieutenant Colonel Henry Percy of the Grenadier Guards, who tended to write about the progress of the war rather than the more trivial aspects of the living conditions, felt compelled to write the following words: “We are now far from comfortable, the south-westerly gales continuing without interruption with very heavy rain which makes our tents and everything moist and unpleasant, and an utter impossibility of going out without being up to one’s calf in mud and water.”

As the weeks passed by, the number of men fit for duty greatly dwindled. Drummond again noted: “I found our men in an awful plight – only 100 left fit for duty, and some of them very shaky. Almost all have scurvy, and dysentery kills two, three, or four every day; they have been so terribly overworked and so ill-clad and fed.”

Perhaps the only consolation for the surviving men of the Guards Brigade during the winter of 1854-55 was that there was very little in the way of fighting to be done. However, when the weather improved there would still be much fighting ahead, until Sevastopol finally fell in September 1855.

The fall of Sevastopol

Throughout much of 1855, the horrific Siege of Sevastopol had dragged relentlessly on. In June an unsuccessful attack was mounted by the Allies on the Malakoff and the Redan redoubts. For this the Guards Brigade had been held in reserve, while the action met with abject failure for the Anglo-French force. Captain Drummond had expected something decisive to come out of the result, but he, as with many in the brigade, was left feeling desperately disappointed. After the attack he wrote, “Why assault it [the Redan]? If we take the Malakoff the Redan is



British artillery bombards Sevastopol. The siege of the city lasted 337 days until it finally fell on 9 September 1855.

untenable; whoever has the Malakoff commands the whole surrounding country and works."

Another tragedy struck the British Army on 28 June, when Lord Raglan died of dysentery and depression. Although he was far from universally loved, Captain Gerald Goodlake of the Coldstream Guards felt he would be missed for "what he could have done for the Army at home." Command of the British Army in the Crimea passed to General Sir James Simpson, but he disliked the position and quickly resigned. In his place came Lieutenant General William Codrington, a Coldstream Guardsman. Many men of the Guards Brigade were probably pleased to see one of their own in command.

Another to die in the Crimea was Drummond, by then a brevet major, when, on 13 August, a Russian shell exploded near the trench he was in. Lieutenant Colonel William Scarlett of the Scots Fusilier Guards described his death: "A shell exploded over his head and a piece entered his brain. He never opened his eyes or shewed any sign of consciousness after... He was gently carried up to camp, and he drew his last breath at about half-past nine."

On 31 August an order was issued to the Guards Brigade to exchange their Minié rifles for the new 1853 Pattern Enfield rifle. The

Crimean War had come at a time when the British Army was undergoing major change with regards to its weapons, moving away from the 1842 Pattern smoothbore muskets, which were being slowly replaced by far more accurate rifles. Many, including the Guards, had gone to war in the Crimea armed with the Minié, but the Enfield would come to see much service before the war was over.

An end to the war, however, was now finally in sight. The Russians retreated from Sevastopol in September and the city subsequently fell to the Allied forces on the 9th. The siege had lasted a staggering 337 days. Peace negotiations followed, with the war officially ending on 30 March 1856. The Crimean War had been a bloody affair for the men of the Guards Brigade, but the survivors could now look forward to a return home after over two years away.

Homeward journey

With the war over, the Third Grenadier Guards would be the first battalion of the Guards Brigade to leave the Crimea, boarding the *St Jean d'Acre* at Kamiesch Bay on 3 June 1856. The next day the First Coldstream Guards embarked aboard the *Agamemnon*, also at

Kamiesch Bay. A few days later, on 11 June, the First Scots Fusilier Guards were ordered to board the *Princess Royal* at Kasatch.

The Coldstream Guards were the first to arrive home, on 28 June, landing at Spithead, from where they moved by train to Aldershot. Next came the Third Grenadier Guards, who disembarked at Portsmouth on 1 July, and likewise travelled to Aldershot by train. Finally, the First Scots Fusilier Guards arrived at Portsmouth on 4 July, before likewise journeying on to Aldershot.

About a week later, the Guards Brigade went to London and paraded in Hyde Park. Higginson recalled "an inspection of the line by the Queen, followed by a march past and a general advance in line completed the ceremony. A few kindly words of welcome from Prince Albert, and the three battalions, which had endeavoured during an absence of two years and a half to uphold the dignity of the Brigade of Guards, returned to their ordinary duties as Household troops."

Now firmly back in the routine life of peacetime, he continued, "I returned to duty as a subaltern, and within three days was in command of the Buckingham Palace Guard as a Lieutenant!"



Images: Alamy, Getty



VICTORIA'S HAMMER

GARNET WOLSELEY

This general was the brains behind a handful of unconventional campaigns during Queen Victoria's reign

WORDS FRANK JASTRZEMSKI

A bearded sergeant lugged Captain Garnet Wolseley back from the front line to the surgeon's tent. The 21-year-old captain looked more dead than alive, having been severely wounded when a Russian shell exploded in the British trenches at Sevastopol. Wolseley looked hideous: the skin on his left cheek hung down to his neck, his right eye bulged from its socket, and his face and legs had gashes and cuts from rock fragments that had struck him like projectiles. The surgeon managed to patch the officer up and sewed his left cheek back into place.

When he heard the news that the final British assault would be launched on Sevastopol, Wolseley hobbled out from his hospital bed to a horse. He hoped to ride to the front line and share in the glory. Partially blind and crippled, the young captain burst into tears in frustration when he couldn't mount the beast due to his ailments. But the young army officer would have future opportunities to distinguish himself in the queen's service.

Dr Joseph H Lehmann, in his superb biography on Wolseley, labelled the general as the "supreme master of irregular warfare". His campaigns against the Métis in Canada, the

Ashanti in West Africa, Colonel 'Urabi's rebels in Egypt and the Mahdi's Ansar in Sudan were models for how to conduct a military campaign far from a base of operations and overcome logistical hindrances. His campaigns were conducted with speed, efficiency and a clearly defined objective. Those around him coined the phrase 'Everything's all Sir Garnet' to signify that everything was accounted for with great care and thoroughness during a Wolseley campaign. Apart from his final effort, all his missions ended with success.

Garnet Joseph Wolseley was born on 4 June 1833 in Dublin, Ireland, the son of an army major. His father died at an early age, leaving his mother with seven children and a meagre army pension. Wolseley wanted to enter the army like his father, but did not have the money to purchase an officer's commission. He wrote two letters to the Duke of Wellington asking the hero of Waterloo to grant him a commission based on his father's service record, but nothing came of it. His mother came to the rescue and pleaded in a letter of her own to Wellington to grant him a commission. In 1852 Wolseley received an appointment as an ensign in the 12th (East Suffolk) Regiment of Foot at the age of 18.

For Wolseley, promotion would have to be earned. The best way to achieve this would be to get noticed through reckless deeds on the battlefield. He was obsessed with being part of every campaign, and volunteered for the most dangerous assignments. But Wolseley was no fool. One officer later noted, "He was possessed of a courage equal to his brain power." He transferred to the 80th (Staffordshire Volunteers) Regiment of Foot for a chance to see action during the Second Anglo-Burmese War.

The war ended before he arrived, but he took part in General Sir John Cheape's storming of the bandit chief Nya-Myat-Toon's fortified stockade at Kyoukazeen in 1853. Cheape's first attack failed. When volunteers were called to conduct a suicidal frontal assault and secure a foothold, Wolseley stepped forward. This was his chance. He yelled "Come on! Come on!" to his men as he rushed head-on at the enemy's defences. He tripped into a Burmese mantrap and was nearly impaled. Ashamed, he climbed out of the hole and rushed back to the British line while under fire, dreading that he would be shot in the back like a coward.

General Cheape called for volunteers for a second time after the initial assault failed.

BRITAIN'S GREAT 19TH CENTURY SOLDIER

Sir Garnet Wolseley has largely been forgotten, but during a career spanning nearly 50 years, he became one of the most celebrated British generals of the Victorian period. His victories contributed to maintaining Britain's rule in North America, Africa and Egypt. When he died in 1913 he was laid to rest in St Paul's Cathedral with two of his country's greatest war heroes, the Duke of Wellington and Admiral Horatio Nelson.

**"DURING A CAREER
SPANNING NEARLY 50
YEARS, HE BECAME ONE
OF THE MOST CELEBRATED
BRITISH GENERALS OF
THE VICTORIAN PERIOD"**



Wolseley stepped forward again, anxious to reclaim his pride. This time the storming party successfully penetrated the stockade, routing the enemy defenders, but not before Wolseley fell wounded. Despite having a piece of metal in his left thigh with blood oozing all over, he experienced “unalloyed joy and elevating satisfaction”. He earned promotion to lieutenant, while the other officer who stormed the stockade with Wolseley was killed.

Lieutenant Wolseley transferred regiments for a third time in 1854. This time it was to the 90th Perthshire Light Infantry, destined for service in the Crimea. War had erupted between the Russians and Ottomans, leading to the intervention of the British and French. Wolseley volunteered for service with the Royal Engineers, aware that their assignments in the trenches surrounding the Russian-held Sevastopol were among the most dangerous. He suffered the loss of sight in the same eye as Admiral Nelson, when he was severely wounded by a Russian shell. His bravery, energy and resourcefulness gained the notice of his superiors.

After Crimea, Wolseley and three companies of his regiment were detained on their way to China when the sepoys mutinied in India in 1857. He joined Sir Colin Campbell’s army, taking part in the relief of Lucknow. He made sure he was the first man to reach the besieged Residency. But the ambitious officer gained censure rather than praise from his superior for superseding orders. He finally made it to China in 1860 as a member of Sir James Hope Grant’s staff during the Second Opium War,

“HE SUFFERED THE LOSS OF SIGHT IN THE SAME EYE AS ADMIRAL NELSON, WHEN HE WAS SEVERELY WOUNDED BY A RUSSIAN SHELL”

taking part in the assault on the Taku Forts and the obliteration of the Summer Palace. By the age of 25 Wolseley was a major with a collection of medals dangling from his breast.

Wolseley took two months leave in 1862 and travelled to the United States to observe the civil war being fought between the North and South. He tagged along with General Robert E Lee’s Confederate Army of Northern Virginia. Wolseley admired General Lee and declared that, “I have met but two men who realise my ideas of what a true hero should be: my friend Charles Gordon was one, General Lee was the other.” He criticised the “inefficient manner in which both he [Lee] and his opponents were often served by their subordinate commanders, and how badly the staff and outpost work generally was performed on both sides”. Wolseley always prided himself on having an efficient and tight-knit staff, nicknamed the ‘Wolseley Gang’, though sometimes they could be quarrelsome and over ambitious.

Wolseley conducted his first independent campaign in 1870. A Métis leader named Louis Riel led a revolt and established the Republic of the Northwest in the Red River Colony when the

Hudson’s Bay Company turned over the land they were living on to the Canadian government. They refused to become Canadians. Riel’s followers captured Fort Garry, a station of the Hudson’s Bay Company, and established their new capital. Riel took it a step further when he ordered the execution of a cantankerous surveyor named Thomas Scott.

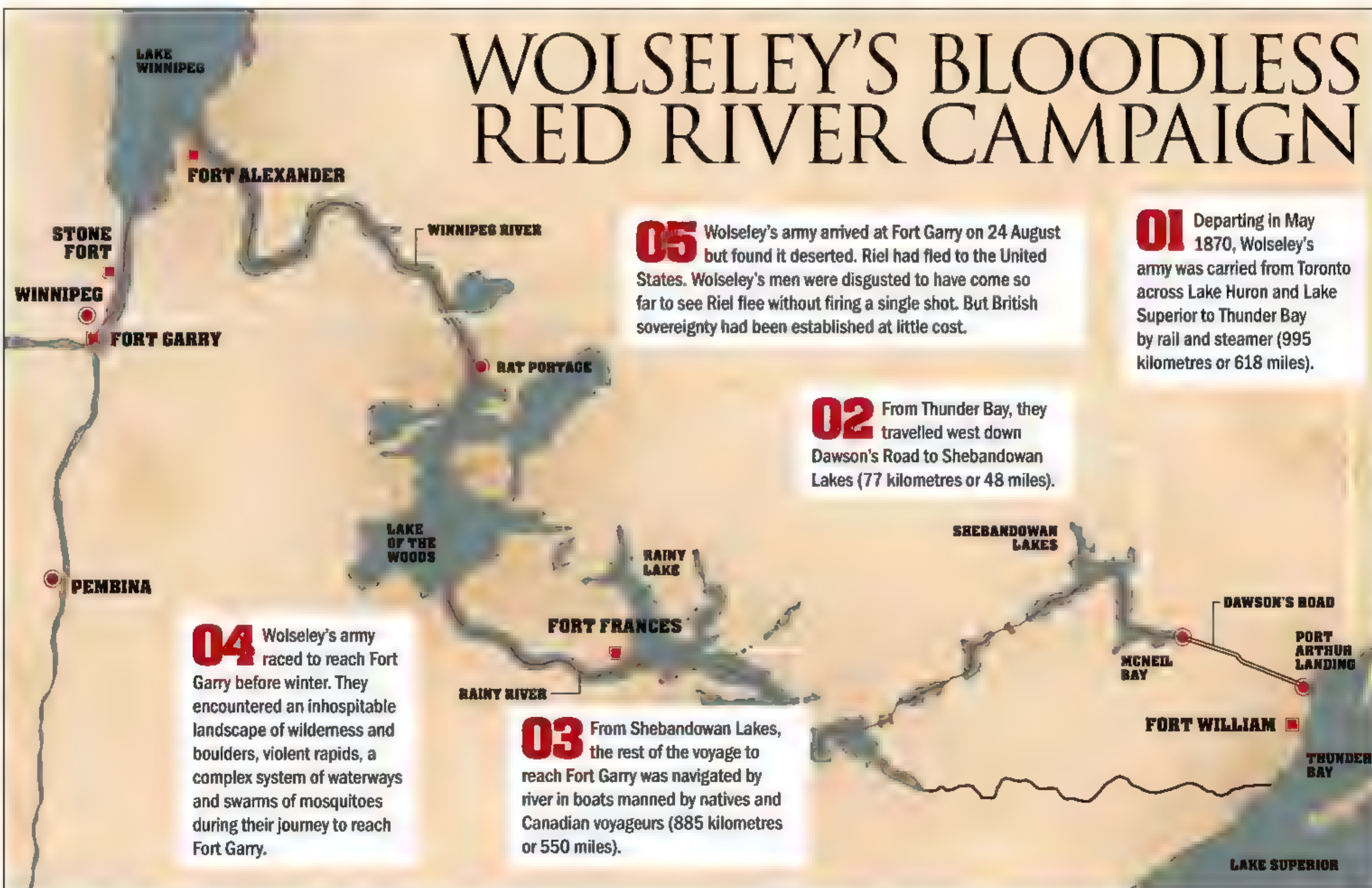
Wolseley, who was serving in Canada as a quartermaster general, was selected to command the army to be sent into Western Canada to secure British sovereignty. This would be no typical military campaign. He would have to transfer 1,400 Canadian militiamen and British regulars across nearly 2,000 kilometres (1,250 miles) of impenetrable wilderness and down swollen rapids and rivers to reach Riel’s base at Fort Garry. Half of the journey had to be made through territory few had navigated before. Lieutenant William Butler of the 69th Foot, who joined Wolseley, declared that the expedition would require a combination of brains, skill and muscle. Most thought it would be impossible.

Wolseley got to work organising and methodically planning the expedition – a Wolseley trademark for future campaigns. Those around him were inspired by his energy, confidence and determination. He hired First Nations and Canadian voyageurs to man the boats assigned to transport his soldiers. All provisions required had to be calculated before departure and transported with the army. Wolseley inspected all equipment and added items he thought appropriate to make his men’s job easier and make them more efficient,

British troops landing during
Wolseley's Ashanti Campaign



WOLSELEY'S BLOODLESS RED RIVER CAMPAIGN



"THE HOSTILE CLIMATE IN WEST AFRICA WAS A GREATER THREAT TO HIS MEN THAN THE ENEMY, SO HE HAD TO GET HIS MEN IN AND OUT OF THE JUNGLE AS QUICKLY AS POSSIBLE"

*"It is quite true that Wolseley is an egoist and a braggart. So was Nelson."
— Prime Minister Benjamin Disraeli*



in one instance replacing the army-issue axe with a more effective American design. Butler, impressed by his meticulous planning, wrote that Wolseley had "the best and most brilliant mind I had ever met in the army".

The campaign was a work of genius. His army successfully travelled by railway, steamer, boat and on foot through the near-impenetrable territory to reach Fort Garry on 24 August after a three-month journey, but Riel had fled to the United States without offering any resistance. Wolseley established British sovereignty without losing a single man or firing a shot, at the cost of a meagre £100,000. The logistical challenges overcome during the expedition proved to be greater obstacles than any opponent Wolseley could have met on the battlefield. He was knighted for his success.

In the aftermath of the Red River expedition, he worked with the Secretary of State for War Edward Cardwell to reform the British Army. He called for reforms such as abolishing purchased commissions, shortening the term of service, improving education and creating the modern army reserve. Wolseley, who had made his way up the army hierarchy without purchasing a commission, understood how this hindered reliable officers from advancing. Like most change, it generated controversy and resistance in the ranks of the army. The Duke of Cambridge, the commander-in-chief of the British Army, criticised Wolseley for being too radical. Wolseley was ahead of his time.

In 1873 Major General Wolseley was dispatched with an expedition to West Africa in response to Ashanti aggression. Under the leadership of King Kofi Karikari, an Ashanti army of 12,000 men defeated local tribes in the British protectorate and marched on the British base at Elmina. A detachment of British soldiers and marines successfully defended the town. Wolseley handpicked 35 officers, the "best and ablest men" he could muster from the empire, to accompany the expedition to punish the Ashanti king.

Wolseley laid out a clear plan and made the necessary arrangements. The hostile climate in West Africa was a greater threat to his men than the enemy, so he had to get his men in

Wolseley and his men had to contend with natural obstacles during the Red River expedition



and out of the jungle as quickly as possible. Struck down by fever, he nevertheless led an army of 4,000 composed of locally raised levy troops, British regulars, marines and West Indies troops over 160 kilometres (100 miles) towards the Ashanti capital of Kumasi in January 1874 – the least hazardous time of year for his men. He won a decisive victory at the village of Amoafu on 31 January. He reached Kumasi by 4 February and proceeded to burn the capital and demolish the king's palace. His quick success caused King Kofi

Karikari to agree to pay the British 50,000 ounces of gold and to consent to other humiliating demands. Wolseley was invested with the Grand Cross of the Order of St. Michael and St. George and was made a knight commander of the Order of the Bath.

Wolseley bounced between administrative posts following the Ashanti campaign. He served as the chief administrator of Natal and commissioner and commander-in-chief of soldiers in Cyprus. He was sent to take command of the forces in South Africa to



Wolseley's march on the Ashanti capital of Kumasi



A depiction of the
Battle of Tell-el-Kebir
in 1882



relieve Lord Chelmsford following the disaster at Isandlwana, but he arrived around the time the ousted general won a decisive victory at Ulundi. Wolseley afterwards fought a campaign against the Bapedi under the leadership of Chief Sekukuni, bombarding him into submission at his mountain fortress. For this, he received the Grand Cross of the Order of the Bath.

He spent a brief time serving as adjutant general before being dispatched to Egypt to crush Colonel Ahmed 'Urabi's nationalist revolt in 1882. The British backed the ineffective Khedive Tewfik in order to protect their financial interests in the country. Wolseley, who was by now a national hero, was chosen for the task. He arranged for 40,000 soldiers and 41,000 tons of supplies to be shipped to Egypt. He deceived 'Urabi on where he would conduct his landing by feeding false information to the British newspapers.

He landed his army at Port Said and moved inland towards the entrenched Egyptian position at Tell-el-Kebir. Wolseley planned to march 13,000 men to the outskirts of 'Urabi's entrenchments during the night and strike his position at daybreak, hoping to catch the 26,000 Egyptians unprepared. Timing and the element of surprise were crucial. Few thought this bold manoeuvre could succeed. On 13 September 1882 Wolseley's column struck and routed 'Urabi's army after a fierce struggle.

Wolseley once again was the hero of the hour. But his next campaign, in the Sudan, would be his last. On 4 August 1885 Parliament voted to send an expedition to rescue General Charles George 'Chinese' Gordon, who was besieged in Khartoum by the Mahdi's army. It

"GORDON'S DEATH WAS A NATIONAL CALAMITY, AND WOLSELEY BECAME A SCAPEGOAT. HE NEVER AGAIN HELD A FIELD COMMAND"

was a race against time to reach Khartoum, over 2,200 kilometres (1,400 miles) from Cairo. The expert at directing this kind of operation was called on again to rescue Gordon.

Everything was meticulously planned for and prepared by Wolseley. He intended to take his army up the Nile by boat to Khartoum, similar to his Red River expedition. Wolseley had nine-metre (30-foot) boats built to navigate the Nile's cataracts. He even recruited crewmen from Canada and Africa to man them. Thousands of men and their supplies were then transported up the Nile towards their destination in Sudan.

But Wolseley's column moved too slowly. It seemed as if everything that could go wrong did. He sent a desert column to reach Gordon before it was too late, but its commander, Major General Sir Herbert Stewart, was mortally wounded at the Battle of Abu Klea. "The sun of my luck set when Stewart was wounded," Wolseley later wrote. A less aggressive officer, Sir Charles William Wilson, assumed command of the relief column. Wilson reached Khartoum less than 48 hours after it was stormed and Gordon killed. Gordon's death was a national calamity, and Wolseley became a scapegoat.

He never again held a field command. When the Duke of Cambridge stepped down in 1895 Wolseley assumed the role of commander-in-chief of the British Army. But the position had been stripped of its authority, to the disgust of Wolseley. He finally retired in 1901 as his brilliant mind was slowly being destroyed by Alzheimer's disease.

The master of Queen Victoria's wars drifted into ignominy even before his death. The outbreak of World War I would wipe out his public memory altogether, replacing him with new heroes like Kitchener, Haig and Churchill. He complained before his death that he wished to die like Nelson in the heat of battle, not in a bed "like an old woman".

He most likely would have been recognised today as Britain's greatest soldier of the 19th century, had he died like Nelson, at the apex of his career.

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**WAR_{in}
FOCUS**
ON THAT BOMBSHELL

Taken: 29 September 1943

Members of the Women's Royal Naval Service (WRNS) wheel a torpedo, ready to be loaded into a submarine at Portsmouth harbour. The WRNS, the members of which are nicknamed 'Wrens', was formed in 1917 as the women's branch of the Royal Navy. Initially, its role was to take on auxiliary and support roles in the navy that had been vacated by men serving in combat.



The Light Horse have a special place in Australian history, and they are particularly feted for their role in the Battle of Beersheba

CHARGE — OF THE — LIGHT HORSE

WORDS STUART HADAWAY

The Australian Light Horse formed at the outbreak of World War I as part of the Australian Imperial Force destined to fight in Europe. The majority of the light horsemen came from the vast, hot and arid rural regions in Australia. Horsemanship, and often marksmanship, was learned from childhood and was for many an essential skill for their daily lives and work.

Two of the country's official historians, Charles Bean and Henry Gullett, enthused about the light horsemen, one describing them as, "the romantic, quixotic, adventurous, flotsam that eddied on the surface of the Australian people". The other noted that nearly all were of British descent and were "the children of the most restless, adventurous and virile individuals of that stock". Even allowing for the tendency of nations to romanticise their World War I soldiers, the light horsemen were spirited, hardened and usually young men with a dashing reputation. With a leavening of Boer War veterans, they had the makings of formidable troops.

Their baptism of fire came at Gallipoli. After training in Egypt, they were committed in May 1915 as reinforcements to the landings that were meant to open the way to Constantinople and knock the Ottoman Empire out of the war. Instead, the light horse took part in a series of hard, senseless and often appalling reconstructions. Light horse actions — most famously the attack on "The Nek" on 7 August 1915.



Australian lighthorsemen
rescue their mates
during a tactical retreat
during the Battle of
Romani, August 1916

**“EVEN ALLOWING FOR THE TENDENCY OF NATIONS TO ROMANTICISE
THEIR WORLD WAR I SOLDIERS, THE LIGHT HORSEMEN WERE SPIRITED,
HARDENED AND USUALLY YOUNG MEN WITH A DASHING REPUTATION”**





A halt in the desert for the Australian Light Horse, taken by Captain F Hurley



As the campaign ended, they were withdrawn to Egypt to be joyously reunited with their horses. The light horsemen prized their mounts: many had brought their own horses with them when joining up. The bonds were close, and these relationships would be the source of comfort and dismay in the years ahead as both riders and mounts suffered in a variety of inhospitable environments.

While the Australian infantry were sent to France after Gallipoli, the three light horse brigades joined the Egyptian Expeditionary Force (EEF). Their task was to defend the Suez Canal, the vital strategic waterway linking the raw resources of the east with Britain's factories.

This was important work and vital to the war effort. The Ottomans had tried to cut the canal in February 1915 and would doubtless try again, but for the men and animals spending weary, monotonous months in desert outposts the task slowly dulled their spirits. Some light horsemen attempted to get to France where the 'real' war was, but those who stayed would soon find all the action they could wish for.

"THE LIGHT HORSEMEN PRIZED THEIR MOUNTS: MANY HAD BROUGHT THEIR OWN HORSES WITH THEM WHEN JOINING UP"

Sinai Desert

In April 1916 the Ottomans again attacked the Suez Canal. After their defeat, the Australian Light Horse and the New Zealand Mounted Rifles (NZMR) led the EEF into the desert. The British dug in around Romani, while a railway and pipeline were slowly built eastwards to keep them supplied. From here, two brigades of light horse and NZMR patrolled deeply and aggressively into the desert, where a much larger Ottoman force was gathering for a third attempt on the Suez Canal.

The Australians were already partially conditioned to the environment and proved adept at this small war of scouting, skirmishing and ambushing. They maintained a punishing routine, with each brigade spending a long day out on patrol, followed by a day on picket duty in the sand dunes south of Romani. With precious little rest between duties, strictly limited water and the burning Sinai summer, it was relentless work under the most difficult of conditions.

The Ottoman attack on Romani on 3 August 1916 ran straight into a carefully prepared British trap. The Australians held a picket line with no prepared positions or barbed wire that might warn the enemy of their presence, and when the Ottomans stumbled into them they conducted a fighting retreat at night while in close contact with vastly superior numbers. The Australians had earned a wild and disorderly reputation in

Egypt, but their performance that night was an incredible display of disciplined fighting efficiency. Although confusion was inevitable, control was never lost and the retreat was a complete success as it drew the enemy in. Having fought all night, the Australians (and New Zealanders) then held a new line through the day, before a counterattack of British and New Zealand mounted troops swept in on the Ottomans' exposed flank.

The EEF pushed the Ottomans back across the Sinai, with the mounted troops leading the way. At the end of the year the Australian Light Horse, British Yeomanry, NZMR and Imperial Camel Corps (ICC) mounted large-scale raids against the last

An Australian light horseman in Palestine





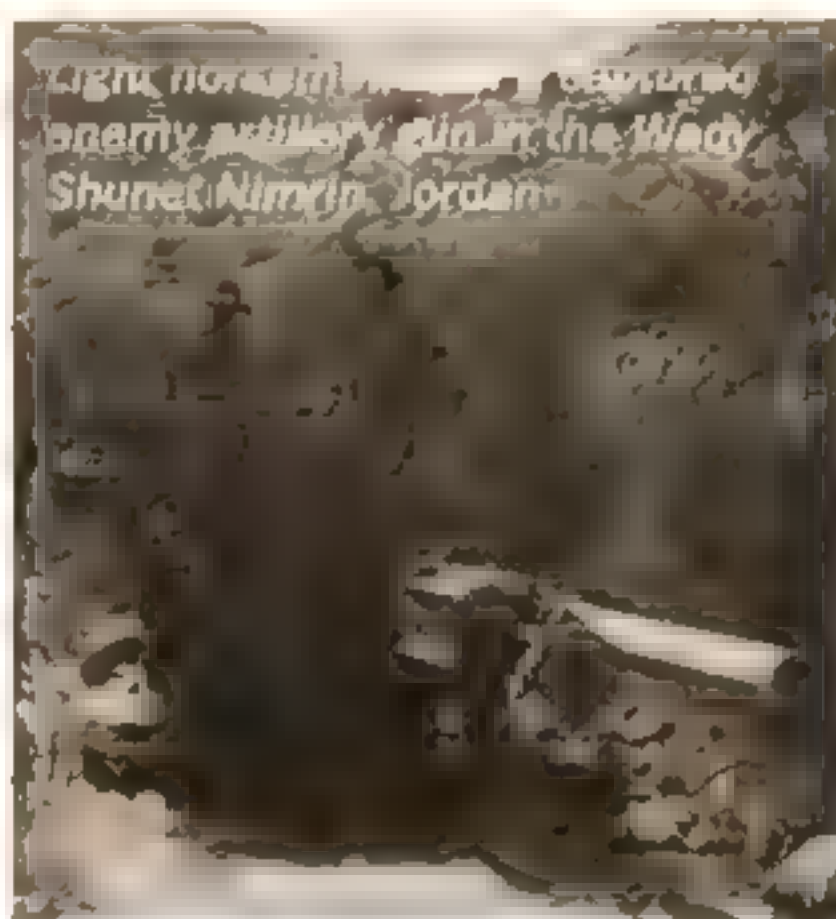
Australian Light Horse on the move across the desert



Clearing the heights of enemy snipers, Nalin



16-inch Krupp gun at Kilid Bahr Fort, Dardanelles



Light horsemen captured enemy artillery gun in the Wady Shunet Nimrin, Jordan



Australian Light Horse watering in the desert

two major Ottoman garrisons in the Sinai, at El Maghaba and El Magruntein.

These two actions showed both the strengths and weaknesses of the mounted troops. The mobility allowed them to strike at night with complete surprise, but their lack of numbers made breaking through the enemy's defences difficult. The horses also provided a major time constraint: they could only go so long without water. Operations had to succeed within a very set timeline. In both raids orders were actually issued to break off the attack just before the final success was achieved. At El Maghaba Lieutenant Colonel Charles Cox, commanding First Light Horse Brigade, thrust the order back at the messenger, declaring, "Take that

"WITH PRECIOUS LITTLE REST BETWEEN DUTIES, STRICTLY LIMITED WATER AND THE BURNING SINAI SUMMER, IT WAS RELENTLESS WORK UNDER THE MOST DIFFICULT OF CONDITIONS"

damned thing away, and let me see it for the first time in half an hour." Within minutes, a bayonet charge by his brigade broke through the Ottoman lines. At El Magruntein it was the New Zealanders and the ICC who made the final charge before the withdrawal order could reach them.

Gaza

With the Sinai secure, several months were spent on the border with Palestine patrolling and building up logistics. In March 1917 the advance was resumed, with Gaza the next objective.

The first attempt on the town on 26-27 March 1917 was a fiasco. Poor planning and communications doomed the attack, and although the objectives were taken at the end of the day, the weary troops were immediately ordered to withdraw from them. The British mounted divisions had spent the day screening

Gaza to the north and east, but in the afternoon the Australian and New Zealand Mounted Division had been ordered to attack the city from the north. They swept into the town, but spread out in an urban environment with night falling and Ottoman reinforcements arriving, they were ordered to retreat before they were cut off and overwhelmed.

The Second Battle of Gaza in April also ended in failure. The EEF was better prepared, but so were the Ottomans. They were exceptional defensive soldiers and had dug in deeper and over a wider area, and the infantry attacks failed to penetrate. The mounted troops were on the eastern flank, pinning down Ottoman forces and blocking any counterattacks from Beersheba.

The EEF now settled down to a summer on the Gaza-Beersheba line. For the mounted troops this meant holding outposts on the desert flank and a return to the cat-and-mouse games of patrolling and raiding, ambushing and skirmishing that they had played the previous summer. Only in October 1917, reinforced and with General Sir Edmund Allenby installed as the new commander, did the EEF make a third attempt to break into Palestine.

Glory at Beersheba

Instead of attacking the enemy's main strength at Gaza, the initial objective was to be Beersheba at the eastern end of the line. From here, the Ottoman line could be cut off from





The First Brigade, Australian Light Horse, passing through Bethlehém on its way to Jericho



Trooper Finniche and his mates, Second Brigade, Sixth Light Horse

behind and rolled up from the flank. But taking Beersheba on the first day was crucial. Despite incredible efforts to develop water sources on the desert flank, such a large force – consisting of the Infantry of XX Corps and the horsemen of the Desert Mounted Corps (DMC) – could only be sustained for a single day. Unless Beersheba and its large wells fell, the whole offensive might have to be called off.

The attack was launched on 31 October 1917 and progressed slowly due to the conditions and distances faced by the troops. The infantry of XX Corps attacked the Ottoman defences southwest of Gaza, while the DMC did the same from the southeast, and light

horsemen also cut the road to Hebron to the north. By 4pm the Ottomans were in retreat, leaving a rear guard holding off the pursuit south of Beersheba. However, it was imperative to get troops into the town to secure the wells before the Ottomans could demolish them. Speed was needed, and the closest mounted troops were the Fourth Light Horse Brigade.

The DMC's commander, General Harry Chauvel, called up the Australian Light Horse and ordered them to storm the town. At 4.40pm they formed up with Fourth Regiment on the right, 12th Regiment on the left and 11th Regiment behind as a reserve. The lines of light horsemen drew their bayonets to use

as swords and began their advance. Ahead of them 200 Ottoman infantry, supported by machine guns and field artillery, manned a crescent-shaped trench system, though without the added protection of barbed wire.

The light horsemen started slowly, keeping the formation tight for maximum impact, but steadily sped up until launching into a gallop over the last few hundred metres. This speed was a lifesaver, as the horsemen closed the gap faster than the defenders could adjust the sights on their weapons, making many bullets and shells fly too high to affect the charging men and horses.

Sergeant Charles Doherty, who charged with 12th ALH, described the moment: "As the

Light horsemen observing Hill 1179 at Esdud, Israel

"THIS SPEED WAS A LIFESAVER AS THE HORSEMEN CLOSED THE GAP FASTER THAN THE DEFENDERS COULD ADJUST THE SIGHTS ON THEIR WEAPONS, MAKING MANY BULLETS AND SHELLS FLY TOO HIGH TO AFFECT THE CHARGING MEN AND HORSES"

A camp of Australian light horsemen among the sandhills, Belah



long line with the 12th... swung into position, the rattle from enemy musketry gradually increased... After progressing about three quarters of a mile [1.2 kilometres] our pace became terrific – we were galloping towards a strongly held, crescent shaped redoubt... In face of this intense fire, which now included frequent salvos from field artillery, the now maddened horses, straining their hearts to bursting point, had to cross cavernous wadies [ravines] whose precipitous banks seemed to defy our progress. The crescent redoubt – like a long, sinuous, smoking serpent – was taking a fearful toll of men and horses, but the line remained unwavering and resolute. As we neared the trenches that were belching forth death, horse and rider steelled themselves for the plunge over excavated pitfalls and through that tearing rain of lead."

"AS WE NEARED THE TRENCHES THAT WERE BELCHING FORTH DEATH, HORSE AND RIDER STEELED THEMSELVES FOR THE PLUNGE OVER EXCAVATED PITFALLS AND THROUGH THAT TEARING RAIN OF LEAD"

While the Fourth Regiment became embroiled in clearing the trenches, the majority of the 12th Regiment managed to sweep into the town. Taking the Ottomans by surprise, most of the wells and their machinery were seized intact. Other charges would be made in the campaign, no less dramatic and often against greater odds, but there were none upon which so much depended. Failure could have led to the entire offensive being called off and would have been another demoralising failure at what was already a very dark time of the war.

After the fall of Beersheba the EEF began an advance that would finish north of Jaffa and Jerusalem by the end of the year. The Australian Light Horse played a role in the advance, scouting ahead of the army and dislodging rear guards and later helping to blunt a major counterattack at Balin. It was

a punishing pace of operations, and it took a heavy toll on horses and men alike.

1918

In 1918 the light horsemen served in the heat and oppressive atmosphere of the Jordan Valley and took part in the two large-scale raids towards Es Salt and Amman. These both failed due to weather, terrain and unexpectedly tough Ottoman resistance. In September 1918 the EEF achieved another breakthrough, shattering the Ottoman armies in Palestine in the Battle of Megiddo. In the ensuing advance into Syria, the light horse regiments were often at the fore.

The pace of the advance left the infantry behind, and the mounted troops bore the brunt. Light horsemen rounded up thousands of prisoners as the enemy collapsed and shattered any pockets of resistance they encountered. They were the first to enter Damascus on 1 October 1918 but left again within hours to continue the pursuit. By the time the Ottoman Empire signed an armistice on 30 October 1918, the cavalry had advanced 500 kilometres (300 miles) in just six weeks, and the light horsemen had entered Australian legend.

CAVALRY OR INFANTRY?

THE LIGHT HORSE REGIMENTS WERE MOUNTED RIFLEMEN, ORGANISED AS CAVALRY BUT TRAINED TO FIGHT ON FOOT

In 1917 the EEF's mounted troops consisted of 16 regiments of British Yeomanry, 12 of Australian Light Horse, three of New Zealand Mounted Riflemen and three of Indian Lancers. Only the Indians were actual cavalry, and the rest were in fact mounted riflemen.

Mounted rifles were organised as cavalry but fought as infantry. Each regiment had three squadrons of around 150 men, broken into four troops, plus machine gun and signalling sections, to make a total of around 500 officers and men. However, although they rode into action, they would dismount to fight on foot, with one man in four holding the horses for the others. This gave the regiments a comparatively weak front line, but they made up for this limitation with mobility and surprise. Initially, only the British Yeomanry carried swords or were trained to use them, but in August 1918 they were issued to the other nationalities too. Despite being apparently out-dated on a modern battlefield, the nature of the war in Palestine was suited to such shock actions and several successful charges were made during the 1917 campaign.

Meanwhile, the Imperial Camel Corps were mounted infantry, and each battalion of about 770 men contained four companies, organised into platoons. The four battalions of ICC consisted of 18 companies, of which ten were drawn from the ranks of the Australian Light Horse.



Mounted riflemen, Yeomanry and Australian Light Horsemen: the primary mounted forces of the EEF



Light horsemen and Indian cavalry round up Ottoman prisoners in late 1918. Some of the Light horsemen carry their swords

"ALTHOUGH THEY RODE INTO ACTION, THEY WOULD DISMOUNT TO FIGHT ON FOOT, WITH ONE MAN IN FOUR HOLDING THE HORSES"



WARⁱⁿ FOCUS

HUNTING GUERILLAS IN THE MARSH

Taken: c. 1961

Soldiers of the Vietnamese army move through marshy terrain under the cover of smoke, during operations against Viet Cong insurgents. The Army of the Republic of Vietnam was disbanded after eventually losing the war to North Vietnam in 1975.





BIRTH OF THE RAF

In April 1918 Britain formed the world's first independent air force in a bid to dominate the nascent aerial battlefields of the Western Front

WORDS STUART HADAWAY

A British B.E.2 flies among the clouds in WWI. In 1916 this type of plane would be the first to shoot down a Zeppelin over Britain



The formation of the RAF was the culmination of issues and problems dating back to 1912, but the major catalyst for change was the start of a new German strategic bombing campaign against Britain in May 1917. The Germans had been using airships – popularly known as ‘Zeppelins’ regardless of actual manufacturer – to raid Britain since January 1915. These raids had been small-scale affairs, with a handful of ships acting largely independently to attack targets over a wide area. Target location and aiming were rudimentary, and bomb loads were small, so in military and material terms they had caused few casualties and little damage. However, they made a serious impact on public morale.

For a thousand years, it was commonly said, Britain had been safely defended from any foreign attack by the English Channel. Louis Blériot’s crossing of the Channel by air in July 1909 had provided a warning, but it was not taken seriously until the coming of the airships. For 20 months the British armed forces (commonly held to be the best in the world) seemed unable to stem the attacks, but this was not a completely fair view. The British were working from scratch to build an unprecedented air defence system.

The Royal Naval Air Service (RNAS) had originally followed the traditional role of the Royal Navy in protecting Britain’s shores. In February 1916 this changed, and while the RNAS retained responsibility for the seas and coast, the Royal Flying Corps (RFC) took over the inland defences, attacking airships over the UK. However, actually intercepting Zeppelins was difficult. The war on the Western Front was the main focus of RFC activities, and it was as voracious for aeroplanes as it was for men. The RFC struggled to keep up with demands from the front, and only a few outdated aircraft could be spared for home defence.

The BE2c was the most common plane used, and with a ceiling of around 3,000 metres (10,000 feet) it could barely reach the heights habitually used by the Zeppelins. It was not just the height that was a factor, but also time. It took a BE2c over 45 minutes to reach that altitude. A pilot could take off with a definite fix on the Zeppelin’s position, but he could not communicate with the ground. After take-off, he would have no idea where in the night sky the enemy was unless the airship were picked up by searchlights.

“FOR A THOUSAND YEARS, IT WAS COMMONLY SAID, BRITAIN HAD BEEN SAFELY DEFENDED FROM ANY FOREIGN ATTACK BY THE ENGLISH CHANNEL”

**"WIRELESS INTERCEPTS
COULD LET THE BRITISH
KNOW WHEN AN ENEMY
WAS TAKING OFF FROM ITS
BASE, AS IT TESTED ITS OWN
WIRELESS EQUIPMENT"**

*Right: The RE.8 is often
seen as an example of the
lacklustre designs produced
by the Royal Aircraft Factory*



This drawback – the inability to provide real-time information to the pilot – was perhaps the biggest problem faced by the defence squadrons. Radar, of course, would have been very useful, but within the technical limitations of the day, by the summer of 1916 the air defence system had become remarkably sophisticated. Wireless intercepts could let the British know when an enemy was taking off from its base, as it tested its own wireless equipment. Any subsequent transmissions by the raider, asking for a navigation fix for example, would also be picked up and plotted. This would warn the defenders that a raid was coming, and possibly its size, but would not identify a target to help them concentrate their forces. In some areas of the coast, acoustic receivers ('sound mirrors') listened for the drone of approaching engines, but this technology was highly unreliable.

Once the aircraft were over land, they would be picked up by the extensive observer organisation that was spread across the country. Police and also railway staff backed up dedicated observer posts manned by soldiers. It may seem incongruous, but the railways formed a dense network across the country and, crucially, were well connected with both telegraph and telephone lines.

Observations would be passed rapidly to sector operations rooms, then copied back to London. Positions were plotted on gridded maps, eventually using coloured markers that corresponded to coloured segments on a clock, each colour a five-minute period. The age of the plot could then be instantly discerned, and those older than ten minutes removed. These techniques and organisations would be resurrected in the late 1930s and formed a pillar of the air defence system during the Battle of Britain.

From the operations room, requests for action could be sent to the HQs commanding the different defence elements. Apart from aeroplanes, there were two lines of anti-aircraft (AA) guns around London at eight kilometres (five miles) and 14 kilometres (nine miles) from the city centre, supported by a screen of search lights and balloon barrages. The system constantly evolved and improved, as did the

*Lieutenant William
Leefe Robinson was
the first man to shoot
down a Zeppelin over
mainland Britain*



*An artist's depiction of the
moment Lieutenant Leefe
Robinson shot down the
first Zeppelin over the UK*

DEFENCE IN DISARRAY

WITH THE ROYAL NAVY AND RFC ACTING ALMOST INDEPENDENTLY, BRITAIN'S DEFENCES WERE IN DIRE NEED OF COORDINATION AND RESTRUCTURING

Some of the delays experienced during the air raids of WWI were the result of the wasteful and chaotic state of Britain's aircraft (and perhaps more importantly engine) procurement system. The RFC had been established in 1912 with a military wing, a naval wing, the Central Flying School, and the civilian Royal Aircraft Factory. All orders for new aircraft, as well as the testing and evaluation of new types, were supposed to go through the Factory. However, the Royal Navy rapidly went its own way, working directly with Britain's tiny aircraft industry to develop their own machines. By 1914 the navy had attained complete independence, and the naval wing of the RFC had become the RNAS.

Although the Factory would produce some excellent aircraft, it also worked slowly, and many felt it was stifling innovation. This became a serious issue as the Germans began to win air superiority in 1915 during the 'Fokker Scourge' and the RFC was left behind in technological terms. It would happen again in the spring of 1917, and while this time German superiority was also due to their own tactics and poor British training, the fact that large parts of the RFC were still flying essentially the same aircraft they had since 1914 was nothing short of scandalous.

The Royal Aircraft Factory tended to be the scapegoat for these failings but, while true to an extent, other factors are also to be blamed. Britain's aircraft and engine industries were small and struggled to expand to keep up with demand. The Factory and the RNAS were often in direct competition to secure the limited output of the factories. Particularly for engines, the British often had to look abroad to make up their shortfalls, and in France representatives of the RFC and the RNAS were in direct bidding wars against each other and the French air services for the output of manufacturers there.

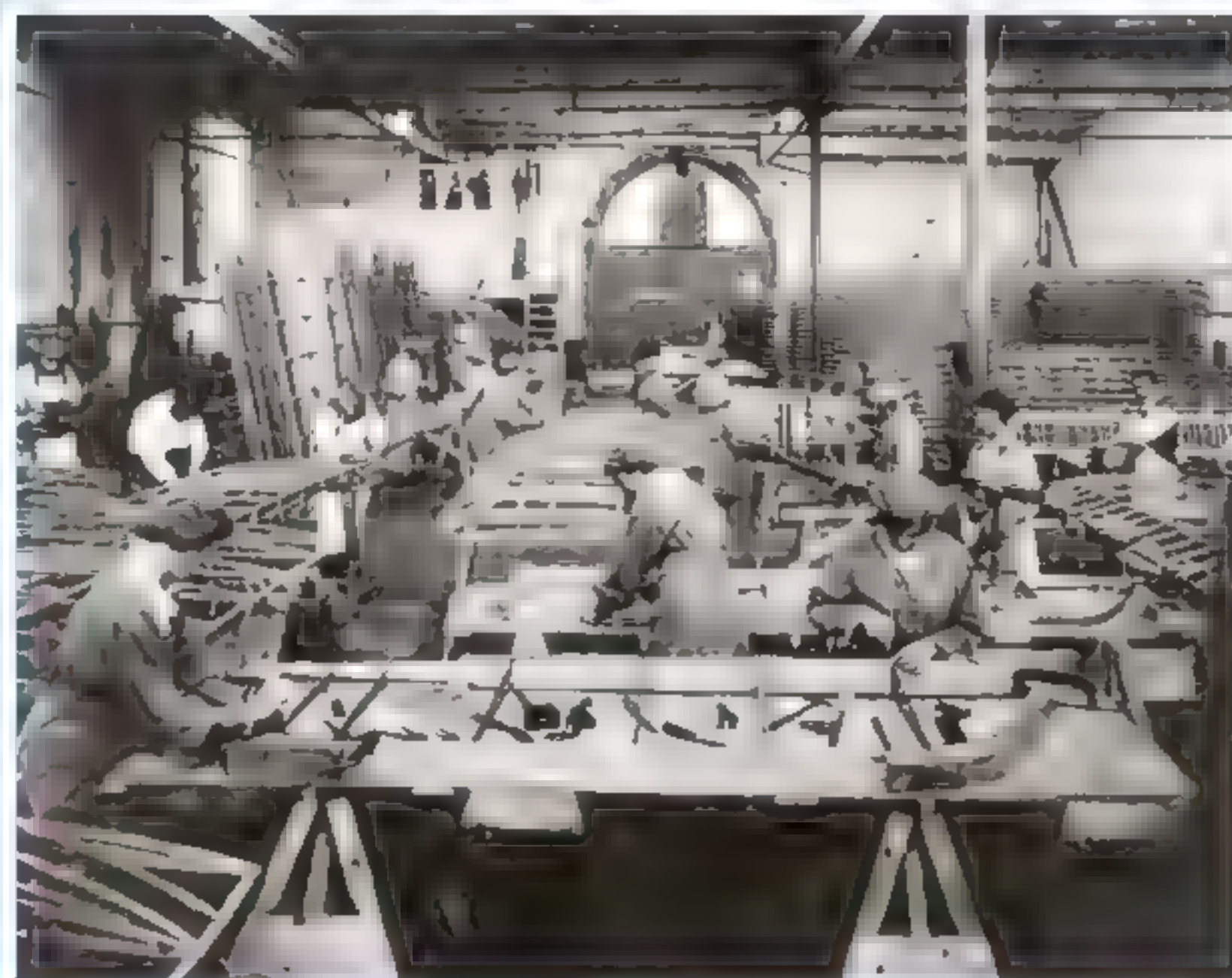
Several attempts had been made to bring coordination and efficiency to the system with a series of advisory committees, but they had no executive powers. These failed to have any effect, with the Admiralty in particular refusing to

co-operate. By the end of 1916 the two services had 9,400 aircraft of 76 different types on order, plus 20,000 engines of nearly 60 types. Even as the issue continued to have serious operational repercussions, it took a judicial inquiry and firm action by the prime minister to rectify the situation. In December 1916 a new Air Board was created with the official weight of a ministry, and the president of the Air Board (Lord Cowdray from January until November 1917) was given the status of a minister.

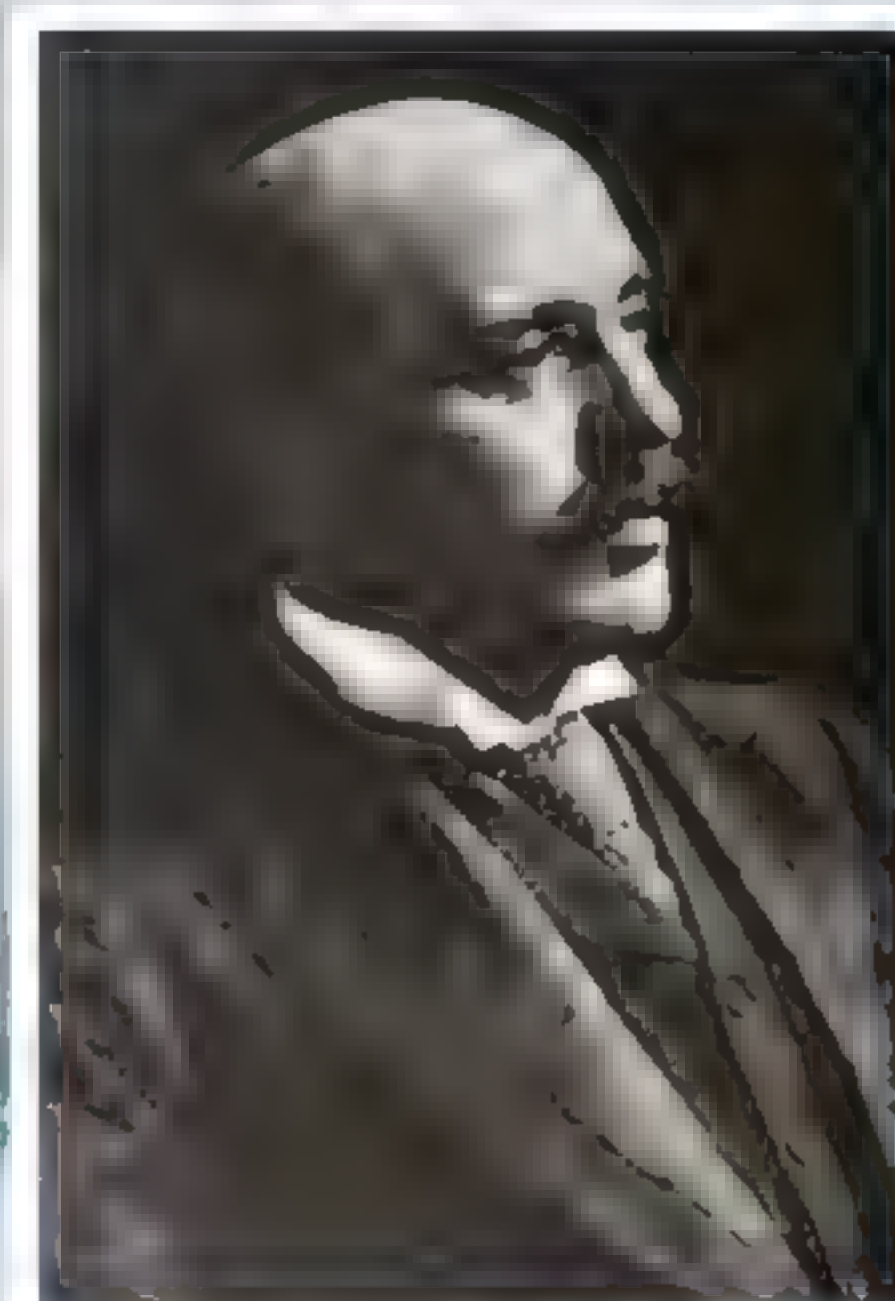
The Air Board was given control over the design of aeroplanes, the numbers and types ordered, and the allocation of aircraft to each service. The Ministry of Munitions had control of actual manufacturing and the inspection of finished aircraft, and so they took over management of the Royal Aircraft Factory. Although the Air Board controlled allocation, this was only in broad terms. They had no influence over how those aircraft were used within each service, and Cowdray's desire to build a strategic bombing force was simply ignored by both the RFC and the RNAS.

The new organisation would have a very real affect on the war in the air as it entered a critical phase. The first four months of 1917 saw the RFC taking increasingly high casualties on the Western Front, culminating in 'Bloody April' when over 250 aircraft were lost. The RFC was attempting to expand and modernise but could not do so while facing such losses. In April 1917 new aircraft types like the SE5a and the Bristol F.2B Fighter began entering frontline service, and from May losses dropped and strength increased. By taking a firm grasp of the production and supply systems, deliveries of aircraft more than doubled from 6,633 in 1916 to 14,832 in 1917, and again in 1918 to 30,782. In June 1917 the War Cabinet approved an expansion of the RFC from 108 to 200 squadrons, and an increase in the RNAS, with confidence that this target could be met. This total was to include a strategic force of ten long-range bomber squadrons, a number which was increased to 50 squadrons in August as calls began for reprisal raids against Germany.

A British aircraft factory. It took years for Britain's aircraft industry to grow to adequate levels, with the right equipment and properly trained staff



Lord Cowdray was president of the Air Board from January to November 1917



German and British aircraft engage on the Western Front. British planes struggled at several stages of the war against the often-superior technology and tactics of the Germans

"THE FIRST FOUR MONTHS OF 1917 SAW THE RFC TAKING INCREASINGLY HIGH CASUALTIES ON THE WESTERN FRONT, CULMINATING IN 'BLOODY APRIL' WHEN OVER 250 AIRCRAFT WERE LOST"

technology. AA guns, for example, were initially simply field pieces pointed upwards, but were gradually improved with special ammunition, better range-finders, improved sights that allowed for deflection, and faster rates of fire.

It took until the end of 1916, but the Zeppelin threat was eventually defeated. After this, operational realities came into play. The Royal Navy desperately needed small, quick-firing guns to arm the merchant ships that were suffering serious losses from German submarines. Indeed, the Germans were very close to winning this First Battle of the Atlantic, and in the winter of 1916 many guns were withdrawn from the air defences for this use. This reduced the number of personnel needed to man the AA cordon. These trained artillerymen were sent to France, where they were badly needed. Pilots were also desperately needed on the Western Front, and while the Home Defence squadrons were

“ON 13 JUNE THE FIRST DAYLIGHT RAID ON LONDON WAS MADE. SOME 162 PEOPLE WERE KILLED, INCLUDING 18 CHILDREN FROM THE UPPER NORTH STREET PRIMARY SCHOOL IN POPLAR, AND 432 WERE WOUNDED”

already committed to sending nine experienced pilots per month to France (to be replaced by newly qualified men), in March the transfer of an additional 36 men was approved. As it was, the 11 Home Defence squadrons (four dedicated specifically to London) only mustered just over 50 serviceable machines against their authorised strength of 96 aircraft. However, with the Zeppelins gone, the Western Front was the priority.

Then, in May 1917, this relieved sense of security was abruptly and dramatically

shattered. The Zeppelins had previously operated alone or in tiny groups, striking almost blind at night, scattering handfuls of bombs across wide areas, but on 25 May 1917 a formation of 23 German aeroplanes from Kampfgeschwader 3 appeared in close formation and in broad daylight approaching London. Although poor weather forced them away from the capital, the raid diverted south and dropped bombs, causing heavy civilian losses in Kent, especially Folkestone. The shock, so soon after the relief of the victory

A Handley Page V/1500 four-engine bomber. Just entering service in November 1918, it was designed to bomb Berlin



over the Zeppelins, forced the government to act. As the raids, carried out mostly by Gotha G.IV twin engine heavy bombers and supported by a few massive four-engine Zeppelin-Staaken Riesenflugzeuge 'Giants' continued, the military once again seemed powerless to stop them.

Two more Gotha raids and a Zeppelin raid followed in June. On 13 June the first daylight raid on London was made. Some 162 people were killed, including 18 children from the Upper North Street Primary School in Poplar, and 432 were wounded. The British were unable to bring down a single enemy aircraft.

After a long pause (apart from a raid on Harwich) the Gothas returned on 7 July, and 21 aircraft dropped 81 bombs in central London. Some 79 aircraft (of 20 different types) were scrambled by the RFC, and another 22 by the RNAS. Two British aircraft were lost, although one Gotha was brought down over the sea. Another four crashed, due to various reasons,

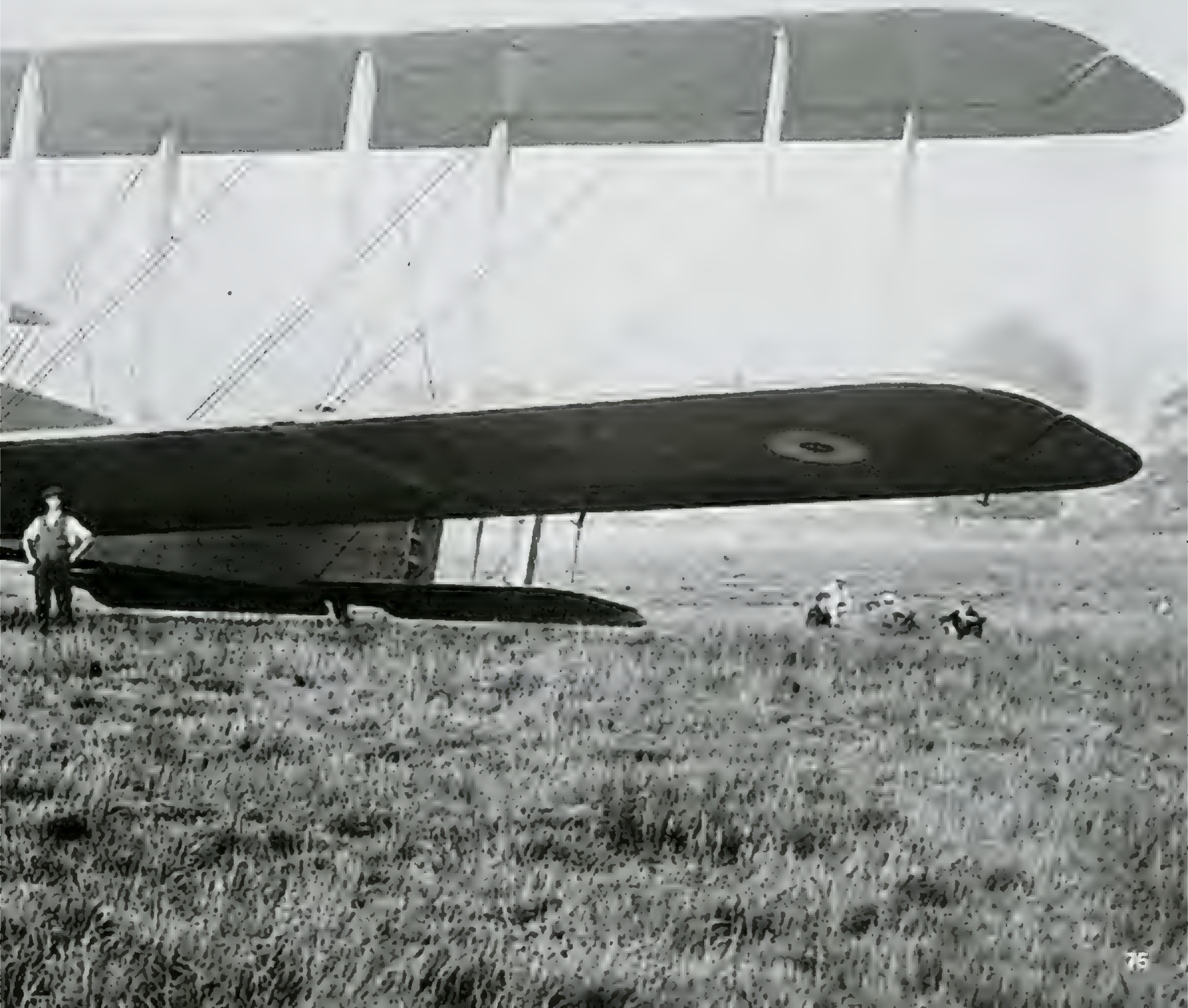
"IN MAY 1917, THIS RELIEVED SENSE OF SECURITY WAS ABRUPTLY AND DRAMATICALLY SHATTERED"

near their bases. A total of 54 people were killed in the raid and 190 wounded.

The apparent inability to stop these raids had several immediate effects, including that King George V changed the royal family's surname from 'Saxe-Coburg-Gotha' to 'Windsor'. More importantly, on 11 July 1917 Prime Minister David Lloyd George appointed the South African General Jan Smuts to establish the Committee on Air Organisation and Home Defence Against Air Raids. The Committee presented two reports, on 19 July and 17 August 1917. The

first of these recommended a range of reforms to improve Britain's air defences. Primarily, Smuts called for better co-ordination of the home defences.

While the air defences may have been advanced and sophisticated, they were sadly disjointed. The RNAS aircraft around the coast worked in conjunction with HQ Home Defence, but they were still under independent, Admiralty control. The observer networks and the AA guns separately came under Lord French, the field marshal commanding Home Defence, as did the RFC's Home Defence Brigade. Therefore, three of the four key elements reported to Lord French, but there was no formal connection between them anywhere lower than this highest of levels. Any attempts to co-ordinate actions had to go all the way up through the different levels of command to the top, and then back down again, costing time.



THE FIRST GOTHA RAID

THE RAID ON 25 MAY 1917 SHOWED MANY OF THE STRENGTHS AS WELL AS THE WEAKNESSES OF BOTH BRITAIN'S AIR DEFENCES AND OF THE GERMAN BOMBERS

The German aircraft were first spotted at 4.45pm by a light ship in the North Sea and reported to the Admiralty. At 4.55pm the Admiralty was scrambling aeroplanes from Manston and seaplanes from Felixstowe and Westgate to intercept them. At 5pm the warning arrived at the War Office, and by 5.15pm the AA guns were on alert (and some were already opening fire as the Gothas started to cross the coast). Some 33 RFC aircraft had been scrambled.

At around 5.30pm the 21 Gothas encountered low cloud over London and diverted south. The cloud also obscured the view from the ground, and the defenders lost track of the raid. Flying in two distinct formations, the Gothas flew south, dropping sporadic bombs on north Kent, while the RFC struggled to reach altitude behind them. The Gothas, flying at over 4,300 metres (14,000 feet), were well above the ceiling of most of the aircraft sent up to find them, which were now searching in vain over London. Only one RFC aircraft, a DH5 being ferried to France, encountered and engaged the enemy, and was beaten off with damage. At 6pm the Gothas dropped bombs on Ashford, and at 6.15pm on Hythe and Saltwood on the south Kent coast, where extensive barracks and training facilities existed. Several civilians were killed or

injured. At 6.20pm the Gothas were over the barracks at Shorncliffe Camp, and 16 Canadian soldiers were killed and another 94 injured by bombs. A few minutes later bombs started to drop across Folkestone, a major cross-Channel port, and a single 50-kilogram (110-pound) bomb landed in Tontine Street, behind the harbour. The narrow street was packed with shoppers, with a long queue outside a grocer's after receiving a delivery of potatoes. The blast killed 33 men, women and children, and injured many more. One Canadian sergeant, recovering from a wound received at Vimy Ridge, recalled, "The whole of the street seemed to explode. There was smoke and flames all over, but worst of all were the screams of the wounded and dying and mothers looking frantically for their kids."

In all, 94 people were killed (17 of them soldiers) and 197 injured (102 of them soldiers). Further RNAS aircraft scrambled from Dunkirk intercepted the raiders, and brought one down over the Channel.

Initially at least, the command and control network had performed well during the raid, spreading the alert and activating the defences rapidly. However, the defences themselves were woefully lacking.

Smuts recommended that a joint headquarters immediately be set up at a lower level, to afford quicker communications and "the unity of command which is essential to any warlike operation". Within weeks, the London Air Defence Area (LADA) was formed to co-ordinate all of the city's defences. Smuts also recommended that the RFC's Home Defence squadrons be properly constituted as permanent units and equipped with modern aircraft, rather than their current use as de facto reserve units only able to launch smaller numbers of obsolete aircraft. As he saw it, the answer to the bomber threat was properly co-ordinated attacks by formations of fighters. AA defences were also to be strengthened. For both the aircraft and the guns, reinforcement would take time as new equipment was manufactured and personnel trained.

The Gothas made three more raids in August 1917, all aimed at east Kent ports. Although one was abandoned because of poor weather, 18 Gothas were lost, four to British aircraft, one to AA guns, and the rest to accidents or Dutch air defences. Britain's defences were stiffening, and the Germans switched to night raids in September. The Gothas now suffered the problems of flying and navigating by night, although of course it also hindered attempts to intercept them. However, the balloon barrages that were strung across the approaches to London were more effective at night, while the reinforced AA batteries were adopting barrage techniques, putting up walls of fire at certain points to discourage the enemy and force them to turn back, rather than engaging single aircraft. The areas around London were divided into strict zones for AA guns, balloons, and aircraft, creating a layered defence and reducing the risks of British fighters falling foul of the ground-based defences.

Further Gotha and Giant raids continued until the last, and largest on the night of 19-20 May 1918, known as the 'Whitsun Raid'. This involved 38 Gothas and three Giants. Only 18 of them managed to penetrate the LADA, dropping 72 bombs. Most were discouraged by the barrage of AA fire – some 30,000 shells were fired – while the (by then) Royal Air Force launched 88 sorties to intercept the bombers. Two enemy aircraft were shot down by AA fire and three by night fighters.

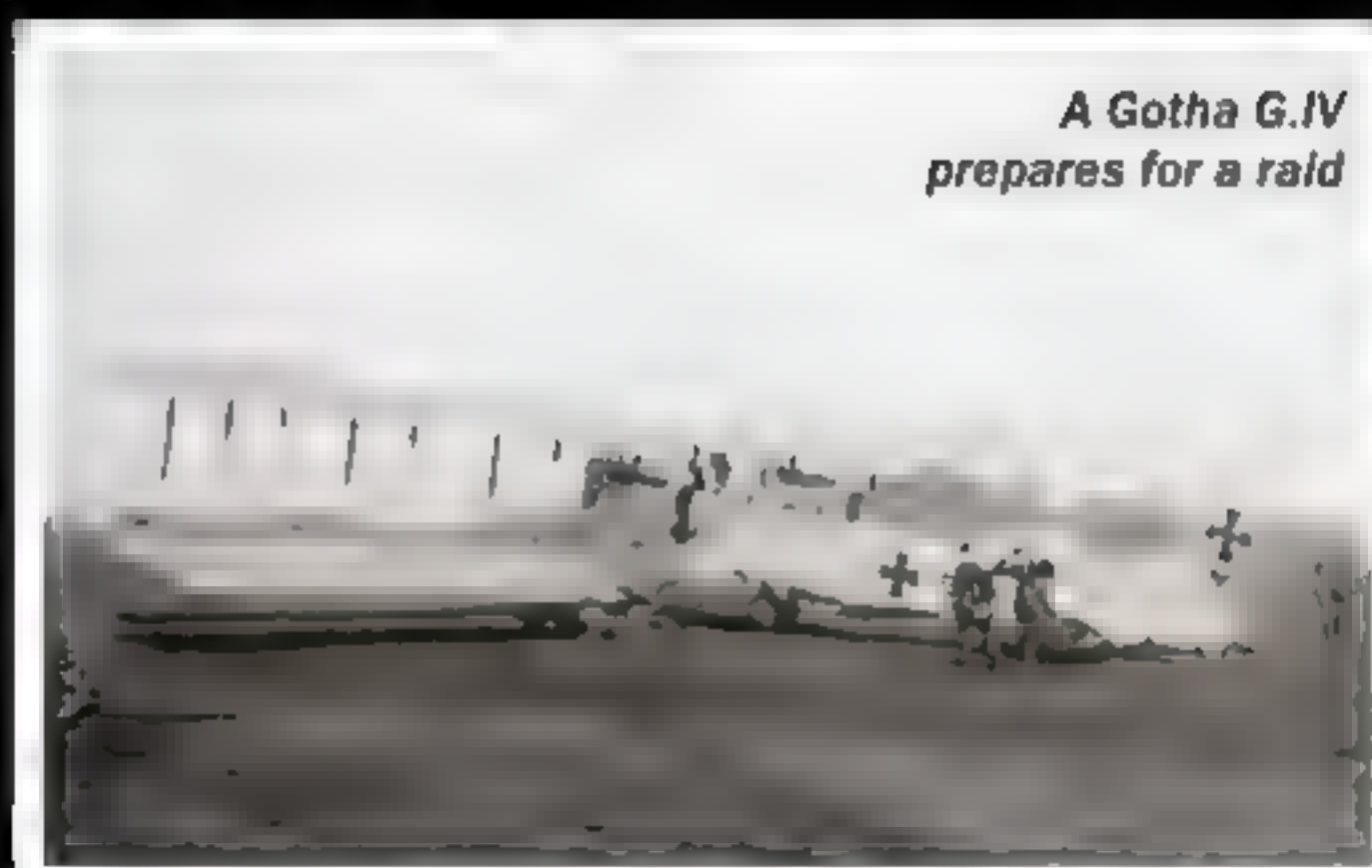
In all, the German aeroplane raids caused 837 deaths (486 in London) and 1,991 injuries

"THE DAY MAY NOT BE FAR OFF WHEN AERIAL OPERATIONS WITH THEIR DEVASTATION OF ENEMY LANDS AND DESTRUCTION OF INDUSTRIAL AND POPULOUS CENTRES ON A VAST SCALE MAY BECOME THE PRINCIPLE OPERATIONS OF WAR"

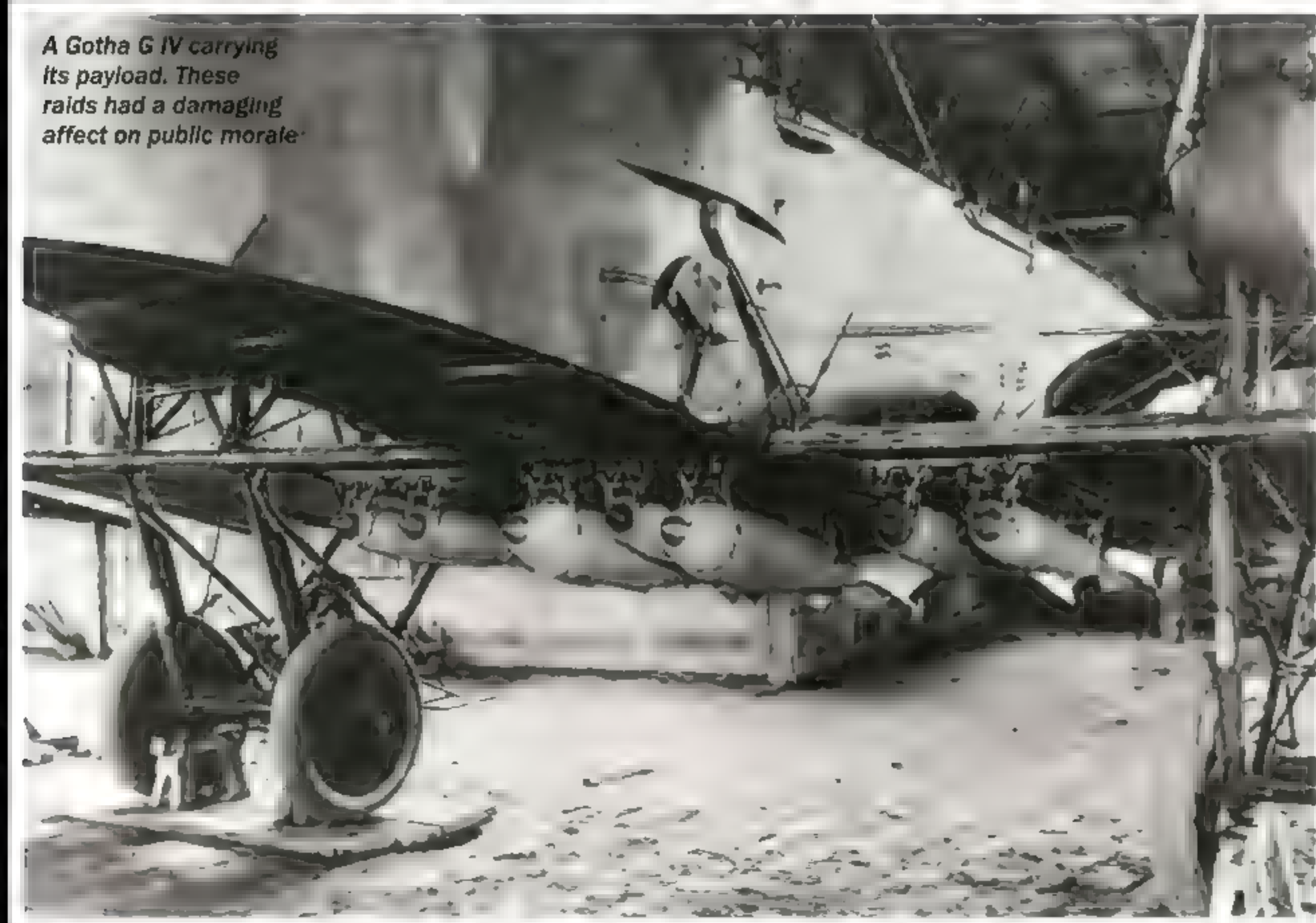
– General Jan Smuts



A Gotha G.IV



A Gotha G.IV prepares for a raid



A Gotha G.IV carrying its payload. These raids had a damaging affect on public morale.



Police in London prepare to warn the public that an air raid is coming

"AA BATTERIES WERE ADOPTING BARRAGE TECHNIQUES, PUTTING UP WALLS OF FIRE AT CERTAIN POINTS TO DISCOURAGE THE ENEMY AND FORCE THEM TO TURN BACK"

(1,432 in London) during their 12-month campaign. 16 British aircraft were lost, while 24 Gothas were shot down by British defences, and 36 more (plus two Giants) were lost because of accidents.

While Smut's first report was successfully overhauling the Home Defence organisation, on 17 August 1917 he presented his second report. This examined the use of and co-ordination between the flying services and, doubtless encouraged by the success of the new Air Board, he concluded that they should be merged into an independent air arm, supported by an Air Ministry. Heavily influenced by the Gotha raids, Smuts enthused that "the day may not be far off when aerial operations with their devastation of enemy lands and destruction of industrial and populous centres on a vast scale may become the principle operations of war, to which the older forms of military and naval operations

may become secondary and subordinated". He wanted to develop a strategic bombing force to this end – a call that was also being echoed across the country as the public clamoured for retaliatory raids on German towns.

The report was quickly, but secretly, acted on, and the many administrative and practical issues surrounding the creation of a new fighting service began to be tackled. Even so, the Cabinet continued to debate the issue. Many of the senior figures brought into the discussion, including Lord Cowdray and General Sir Hugh Trenchard, commander of the RFC in France, thought any such move should wait until after the war, while Smuts and General Sir David Henderson, general officer commanding the RFC and director general of military aeronautics, wanted it done as soon as possible. In the end, the latter party won, and on 6 November 1917 Cabinet passed the draft Air Force Act, which

Right: An early air raid warning poster



THE GROWTH OF THE RAF

AIRCRAFT STRENGTH

RNAS AEROPLANES & SEAPLANES

RFC AEROPLANES

AIRSHIPS

AUGUST 1917
93
7
3

AEROPLANES

SEAPLANES

AIRSHIPS

OCTOBER 1918

20,890

1,281

163

PERSONNEL

RNAS OFFICERS
RNAS OTHER RANKS
RFC OFFICERS
RFC OTHER RANKS

RAF OFFICERS
RAF OTHER RANKS
WRAF ALL RANKS

AUGUST 1917	DECEMBER 1917	OCTOBER 1918
—	4,765	—
—	43,050	—
—	15,522	—
—	98,739	—
—	—	27,906
—	—	263,848
—	—	24,190

was duly passed by Parliament and signed by the king by the end of the month. On 1 April 1918 the Royal Air Force would come into existence. In the meantime, an Aerial Operations Committee was established to look at the logistics behind building a strategic bomber fleet. In early October it was renamed the War Priorities Committee, with wide-ranging authority over munitions production, such was the perceived importance of developing a strategic bombing force.

There was now much to do. At a senior level, new staff and a ministry had to be properly established, although this proved highly problematic. Lord Cowdray resigned in umbrage at being very publicly passed over to be the first secretary of state for air, a job that went to Lord Rothermere instead. Rothermere was a press baron who did not transition well into politics. He hated having his actions debated or questioned, and often acted without consulting his senior staff. Trenchard had been brought back from France to be the first chief of the Air Staff (CAS), but on 13 April 1918 he resigned due to incompatibility with Rothermere. Henderson also resigned from the Air Council, and by the end of April Rothermere himself had resigned. It was an uninspiring start. Rothermere was replaced by Sir William Weir, who made a success of the job, while Sir Frederick Sykes, who had been the original commander of the military wing of the RFC in 1912, became the new CAS. Trenchard would eventually return to France to command the Independent Force of strategic bombers.

There were many administrative questions to answer over rank structures, uniforms and organisation. For these, the new RAF took a very pragmatic approach. Beyond bringing the old RNAS units more in line with the former RFC, most of these questions were given a lower priority, and the focus remained on the operational performance of the new service. With 137 squadrons (plus some flights) spread across the world from the UK to India, and even North America if you included training units, the RAF successfully completed its transition with the minimum of impact on the fighting fronts. Indeed, the new, better coordinated system soon showed its advantages.

Within ten weeks, the RAF was able to activate the Independent Force to start a bombing campaign over Germany. A dividend of both the better procurement system and the ability of the new service to expand away from the tactical focus of the army, the force would inflict small but serious damage on German production, as well as strike a blow against enemy morale. Across all of the fighting fronts, the RAF continued to expand with newer and better aircraft, and the number of active squadrons increased by 30 per cent in just eight months.

In some areas the RAF found new freedom to offer ideas and innovations without being shackled to the army's preconceptions. In Palestine, for example, the RAF was able to offer an air plan for the final British offensive in September 1918 that would have a shattering effect on the Ottoman forces opposing them. In a few short months, the RAF was able to demonstrate the formidable potential of air power in war.



Sir Hugh
Trenchard,
first chief of
the Air Staff



“THE RAF SUCCESSFULLY COMPLETED ITS TRANSITION WITH THE MINIMUM OF IMPACT ON THE FIGHTING FRONTS. INDEED, THE NEW, BETTER CO-ORDINATED SYSTEM SOON SHOWED ITS ADVANTAGES”

The Bristol F.2B Fighter. By 1917 the chaos was clearing, and the British began to introduce some excellent aircraft types



The Sopwith Triplane was an excellent aircraft but only saw limited use with the RNAS, due to the chaotic state of aircraft procurement



Images: Alamy, Getty, Stuart Hadaway

THE THIRD REICH IN PHOTOS INTERIM YEARS

1918-1938

THESE RARE AND REVEALING IMAGES PROVIDE SNAPSHOTS OF EVERYDAY LIFE IN NAZI GERMANY, AND TELL THE STORY OF THE COUNTRY'S DANGEROUS PATH TO WWII

WORDS PAUL GARSON

ILLUSTRATED HISTORY OF THE WORLD WAR STUTTGART, 1916

This image on the cover of the *Illustrated History of the World War* was published around 1916. Germans in tell-tale spike helmets (Pickelhaube) and their Austro-Hungarian allies are depicted as heroically charging into battle. Once the truth behind such propaganda images became realised, the carnage of the war shocked civilisation to its core, regardless of nationality. In the wake of bloodshed on such a vast scale, long-secure world views of history, humankind, religion, economics and morality were left in ruins.

Whole generations of British, French, Belgian, German, Austrian and Russian young men disappeared into the muddy mayhem of protracted trench warfare, where the term 'No-Man's-Land' took on a whole new meaning for the future of armed conflict. The toxic seeds of a future war lay sown into the bloody mire of the battle-scarred European landscape. Its societies were left festering with open wounds that never properly healed, especially in Germany, which saw itself as a victim of treachery and subject to onerous post-war punishment.

German military and radical political leaders foisted the 'stabbed in the back' excuse for Germany's loss of the war, its loyal soldiers purportedly betrayed by conniving politicians and Jewish anti-German forces. Hyperinflation in 1923-1925 struck hard; the German monetary system was destroyed and inflation soared to disastrous heights, while the worldwide financial collapse of the 1929 Great Depression caused mass unemployment, leaving the average German floundering in a seemingly rudderless society. Battles raged on the streets between rival right and left-wing groups, the threat of Communism crashed head-on with ultra-nationalists – among them the nascent Nazi Party rising to the top of the violent stew of conflicting ideologies.

The German populace, having been torn apart externally by World War I and internally by violent political upheaval and economic despair, now looked for a way out, grasping for some straw of hope for a return of stability and prosperity, the angst increased by their self-conception of Germany as the intellectual, technological and creative leader of Europe. Hitler and his avowed goals of re-establishing Teutonic glory and national dominance found a ready audience.

The following original photographs chronicle the events during that interim between two world wars: a 20-year so-called 'peace', during which the turmoil in Germany metastasized into the ascension to power of the Nazis. With Adolf Hitler at the helm of the Third Reich, Nazi social planners would begin fashioning a new state of blood and steel from which would spring the Götterdämmerung of World War II.

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"ONCE THE TRUTH BEHIND THE PROPAGANDA IMAGES BECAME KNOWN, THE CARNAGE OF THE WAR SHOCKED CIVILISATION TO ITS CORE"



CHAOS AND FLAMETHROWERS IN THE STREETS

GENERAL STRIKES, BERLIN, 1923

The French and Belgian military occupation of the Ruhr valley, Germany's major industrial production centre, was prompted by a failure of payment for post-war reparations. In protest, workers staged a prolonged strike encouraged by the Weimar government, which led to hyperinflation. The price of a loaf of bread skyrocketed to 80 billion marks by October. In the photo, civilian police and army troops have brought out a flamethrower and machine gun. The failed strike was called off in September 1923. The photo was sold as a commercial postcard.

MUNICH STREET DEMONSTRATION JULY, 1925

SA 'Brownshirts' parade through their headquarters city's rain-soaked streets. Rifles are held ready by the Weimar Republic's soldiers, who stand aside as the demonstrators pass. An intrepid cameraman snaps his photo as he himself is caught by another unseen camera. The Nazi Party had been banned by the Weimar government due to its inflammatory activities, but the ban was lifted in January 1925.

The Sturmabteilung or 'Storm Detachment' marched to the commands of the charismatic thug Ernst Röhm. Members of the SA were charged initially with protecting the Nazi Party leaders and for spearheading street battles with Communists and rival right-wing opponents. In March of that same year the SS was formed and was initially known as the 'Black Order'. Consisting of only eight men, it would serve as the foundation for an infamous organisation that would eventually number over 1 million.

"THE STURMABTEILUNG OR 'STORM DETACHMENT' MARCHED TO THE COMMANDS OF THE CHARISMATIC THUG ERNST RÖHM"



STATE OF THE ART MOBILE COMMUNICATIONS AUTUMN, 1925



Two Berlin civilian policemen, wearing their traditional 'Shako' helmets, pose with the latest wireless transceiver equipment, including a massive tube radio, antenna and rear-facing 'horn' speaker. Often well-armed, they, along with regular Reichswehr soldiers, were employed by the Weimar authorities to deal with the street demonstrations that often resorted to gunfire. Later the police would be assimilated under Himmler's SS control.



TEMPORARY RISE OF THE BROWNSHIRTS

MUNICH, AUTUMN 1929

Disorderly, prone to violence and bent on radical revolution, the Brownshirts, numbering some 2 million, eventually posed a threat to Himmler's SS as well as Hitler's attempts to court the favour of the regular German army, which saw the SA as a dangerous rabble.

In order to gain the military leaders' support, Hitler ordered the SS to purge the SA leadership. On 4 June 1934, in what became known as the 'Night of the Long Knives', several hundred SA men were arrested and executed, including Röhm, once Hitler's close friend and early ardent supporter. In this photograph, joining his comrades, Hitler's lieutenant, Rudolf Hess (second from left), stares into the camera.

"IN ORDER TO GAIN THE MILITARY LEADERS' SUPPORT, HITLER ORDERED THE SS TO PURGE THE SA LEADERSHIP"

MEETING ROOM - SA & SS MINGLE IN A GERMAN RESTAURANT

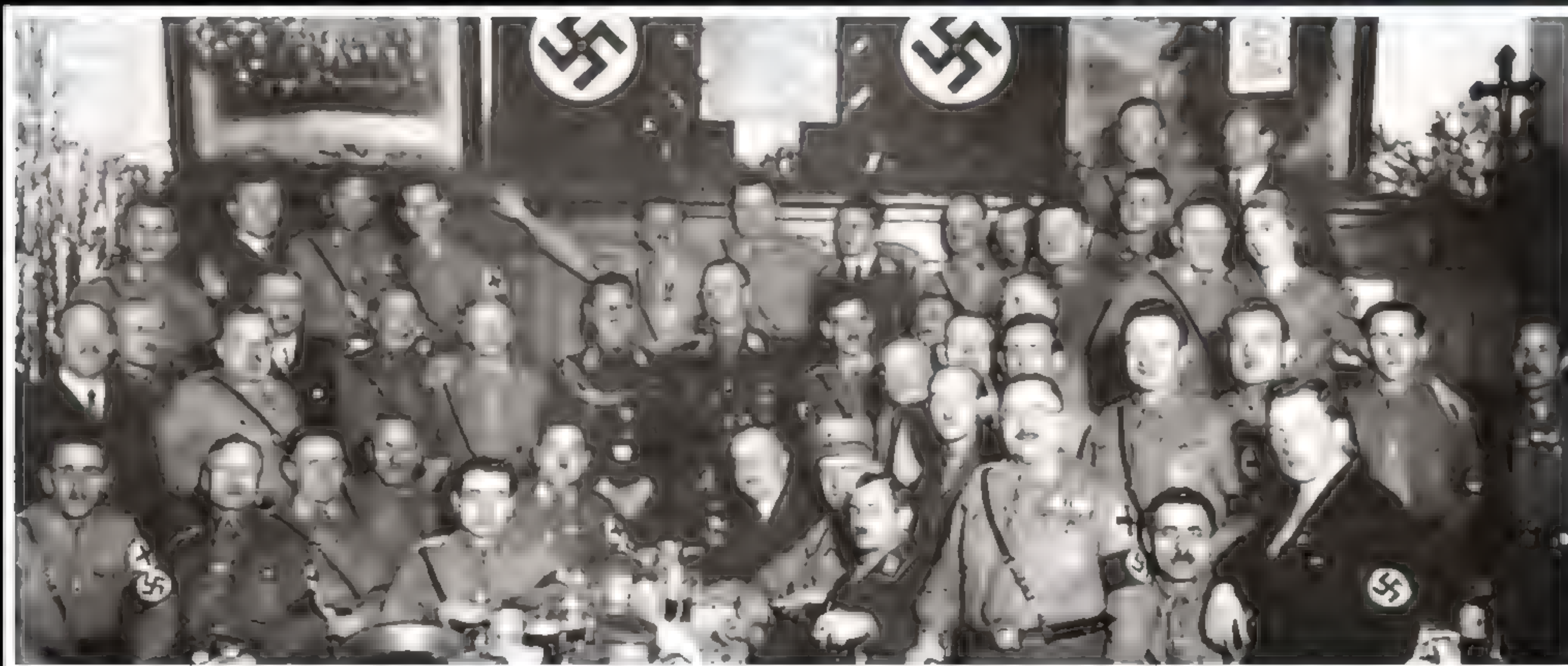
MUNICH, 1930

Nazi Party devotees would often gather for some friendly Gemütlichkeit and a few beers in their local rathskeller. The notorious 8 November 1923 'Beer Hall Putsch' took place in

a similar establishment located in Munich - the Bürgerbräukeller - when Hitler and his cohorts sought to overthrow the state government of Bavaria, the first phase of supplanting the legitimate Weimar Republic leadership.

Planning for the 'revolution' began in 1921 after Hitler took control of the German Workers Party and changed its name to the National Socialist German Workers' Party. Hundreds

joined Hitler for the beer hall event, during which he announced, with a gunshot, that the 'National Revolution' had begun. The shot hit the ceiling and the plan lost steam quickly as police and military took control, with several killed on both sides. After hiding out in an attic for two days, Hitler was arrested, tried and sentenced to a five-year prison term, but managed to use the trial to promote his cause.



TIMELINE 1918-39

1918

WWI ends on 11 November

1919

In January, leaders of the failed left-wing Spartacist Uprising are arrested and shot; In June the Treaty of Versailles is signed

1920

In March disenfranchised veterans of the Freikorps attempt a failed right-wing putsch against the government

1921

Reparations payments begin; Hitler takes on the leadership of the Nationalsozialistische Deutsche Arbeiterpartei (NDSAP); the SA is founded under Ernst Röhm

1923

Burdened by post-war reparations, Germany defaults on making payments; in March the Hitler Jugend is formed

1923

In January French and Belgian troops occupy the Ruhr, Germany's industrial heartland, to ensure payments are made. By September hyperinflation makes government-issued paper money useless

1925

SS (Schutzstaffel) is founded as Hitler's personal bodyguard

1926

Germany joins the League of Nations

1928

In August the US, UK, Italy and Germany sign the Kellogg-Briand Pact, agreeing to forego war except in self-defence

1929

Wall Street Crash; unemployment in the Weimar Republic reaches 1.8 million

1930

German unemployment reaches 3.2 million

BREAKFAST WITH MEIN KAMPF

MUNICH, 1931

A hausfrau has set a balcony table with a pair of kitschy salt and pepper shakers and a vase of flowers, while her husband intently peruses a book of special interest.

Hitler served less than a year of his prison term, during which he managed to dictate *Mein Kampf* ('My Struggle') to Rudolf Hess. The book, published in 1925, was a rambling manifesto for National Socialism and its blueprint for remaking Germany and dealing with its enemies. Millions of copies were sold in Germany and worldwide. Ten years after the failure of the Beer Hall Putsch, Hitler would grasp the reins of power in the new Third Reich.

"MEIN KAMPF, PUBLISHED IN 1925, WAS A RAMBLING MANIFESTO FOR NATIONAL SOCIALISM AND ITS BLUEPRINT FOR REMAKING GERMANY AND DEALING WITH ITS ENEMIES"



CASTING VOTE FOR DICTATORSHIP

BERLIN, SUMMER 1934

On 24 August a plebiscite on whether to grant Hitler dictatorial powers received 89.93 per cent approval from the German public.

1931

Hitler becomes chancellor in January

1932

German unemployment reaches 6 million and the bread lines grow

1933

In February the Reichstag burns, a crime tied to Communists, resulting in 4,000 arrests. In March Hitler is granted total power by the Enabling Act, voted in by the German population; in April Goebbels motivates the burning of 'non-German' books; first concentration camps established; in secret, Germany begins re-armament

1934

In March Hitler has a setback when he fails to take control of Austria after Mussolini, having a treaty with Austria, intervenes. In June, Hitler and Himmler strike against the SA and Röhm is killed. In August, Hitler combines the positions of chancellor and president to become the supreme leader - the *führer*; the military and civilians are required to take an oath to support Hitler

1935

In January, as a result of a plebiscite in which 90 per cent vote yes, the Saar industrial area is returned to Germany after its loss as part of the Treaty of Versailles. In September the Nuremberg Laws, excluding Jews from citizenship and rights, are passed

1937

In November the Anti-Comintern Pact, aimed against the Soviet Union, is signed with Japan; Nazi Germany and Mussolini's Italy sign Rome-Berlin Axis pact

1938

In March, Hitler is successful in assimilating Austria into the German Reich after the vast majority of Austrians vote yes; in October Germany occupies Czechoslovakia's Sudetenland without a shot fired, as the result of 'appeasement' in the hope of preventing war

1939

In August the Molotov-Ribbentrop pact is signed between USSR and Germany, allowing for both to mutually attack Poland in September

PROSPEROUS ARYAN GERMAN FAMILY

BERLIN TIERGARTEN PARK, SUMMER 1935

Dressed for the occasion, a family poses for a portrait, their Hitler-Jugend (HJ) son the centre of attention. The mother wears a summer flower frock and fashionable shoes while the father wears a Nazi Party pin and carries a cane, possibly a result of WWI service. The boy, in his Hitler Youth uniform, has

hooked his hand over his belt, a pose reminiscent of one often assumed by Hitler during public appearances and official photos. By 1935, 60 per cent of German youth were HJ members, its programs supplanting both family and school as the main form of mass education/indoctrination.

"BY 1935, 60 PER CENT OF GERMAN YOUTH WERE HJ MEMBERS, ITS PROGRAMS SUPPLANTING FAMILY AND SCHOOL AS THEIR MAIN FORM OF MASS EDUCATION"



MADRID, 1936

A German officer, who has brought his camera to Spain, poses with his adjutants and one of Franco's generals. Hitler had supplied men and materiel in support of the civil war that erupted in July 1936 between fascist and republican forces. Franco's victory established the third far-right state in Europe, along with Germany and Italy. The Spanish conflict ended on 1 April 1939, exactly five months prior to Germany's invasion of Poland.



TRANSFORMATION OF A NEW RECRUIT

BERLIN, AUTUMN 1936

A nattily dressed man has just arrived for military service, much to the amusement of the NCOs greeting him. Compulsory military conscription was re-established in 1936 as Germany re-armed at a lightning pace, in violation of the Treaty of Versailles.



A PRE-WAR VISIT TO THE TOMB OF GERMANY'S HEROES

EAST PRUSSIA, 1937

Wehrmacht troops pose for a photo with their massive WWI forebears at the Reichsheldenmal Tannenberg. Built in 1927 in Hohenstein, East Prussia (now Olsztyn, Poland), the massive structure was a memorial to the fallen soldiers of the 1914 Battle of Tannenberg – the historic defeat of Russian forces by a German army led by Paul von Hindenburg.

Although in poor health at 85, Hindenburg was asked to run in the 1932 presidential

election as the only candidate capable of defeating Hitler. Although Hindenburg won, the German public, as well as members of the military and industry, demanded Hitler be given the chancellorship. Hindenburg gave way, signing the Enabling Act of 1933, which was the start of Hitler's takeover of the government. Soon afterwards, Hindenburg, 'The Father of the Fatherland', died on 2 August 1934 and was interred at Tannenberg.

STEPPING CLOSER TO WAR

BERLIN,
FEBRUARY 1938

A young soldier manages to mimic the Hitler salute with his booted foot. However, the infamous marching style was reserved for special events, as it was deemed too physically damaging for regular use. In 1938 Nazi Germany brought Austria under its control, as well as a large part of Czechoslovakia, and then aimed its sights towards Poland. The invasion and world war commenced on 1 September 1939.







DURING WWII THE KRIEGSMARINE EMPLOYED A DEVASTATINGLY EFFECTIVE TACTIC THAT THREATENED TO STARVE BRITAIN INTO SUBMISSION

WORDS WILLIAM E. WELSH

Following the Allied victory in 1945, British Prime Minister Winston Churchill admitted in his multi-volume history of the conflict that “the only thing that ever really frightened me was the U-boat peril.”

Through the lens of history it is easy to understand his concern as the Battle of the Atlantic unfolded and the island nation fought for its life against marauding German U-boats that relentlessly attacked Allied merchant shipping. From the day that Britain declared war on Nazi Germany through to 1945, the submarines of the German navy, the Kriegsmarine, under the capable but sometimes questionable command of Admiral Karl Dönitz, sank approximately 3,500 merchant vessels and 175 warships, sending 14 million tons of vital shipping to the bottom of the sea.

The U-boats' heavy toll on Allied merchant shipping was punctuated by remarkable successes against Royal Navy warships, providing a surge of propaganda for the Nazis. Even so, of the 1,162 U-boats that were constructed during World War II 785 were lost. Service with the Ubootwaffe, the submarine arm, was fraught with peril. By the time the war ended an estimated 32,000 German sailors, 30 per cent of those who served aboard U-boats, had been killed – the highest percentage of casualties among German combat forces during the conflict.

An early angst

Despite advice from Admiral Dönitz and his direct superior, Grand Admiral Erich Raeder, that the Kriegsmarine would not be ready to go to war until 1944, Adolf Hitler launched the invasion of Poland on 1 September 1939, plunging the navy into a conflict for which it was ill-prepared. At the time Dönitz had only 56 operational U-boats – eight of which were only suitable for coastal operations or training. In the run-up to war he had pleaded for a building programme that would yield 1,000 ocean-going submarines

with which to strangle the British Isles, but production was slow to gather pace.

Dönitz was a U-boat veteran of World War I and had commanded his own boat and been taken prisoner, so he understood the rigours of U-boat service. Blockade had been unsuccessful during 1914-18 due to Allied employment of the convoy system, a lack of efficient radio communications and mounting losses among the submarines during four years of attrition, but Dönitz recognised that a blockade might actually succeed if emphasis were placed on the construction and deployment of undersea raiders this time around. However, convincing senior Nazi military planners, including Hitler, that such a tactic offered the best chance for victory was a frustrating exercise for Dönitz, who struggled throughout the war to maintain a force sufficient to threaten Britain.

Law and orders

At the outbreak of war Dönitz had already deployed 22 U-boats to critical shipping lanes in the Atlantic. Such a small number of boats would never be sufficient to mount an

effective blockade, but they did make their presence felt. The submarines reached the hunting zones around Britain by sailing around the northern tip of Scotland rather than through the treacherous passage of the English Channel. U-boat commanders initially received specific orders to abide by international maritime law. They were to surface and stop

IN MAY 1945, THE FINAL MONTH OF WWII IN EUROPE U-BOATS SANK 11,439 TONS OF ALLIED MERCHANT SHIPPING. 35 U-BOATS WERE DESTROYED.

“OF THE 1,162 U-BOATS THAT WERE CONSTRUCTED DURING WORLD WAR II 785 WERE LOST. SERVICE WITH THE UBOOTWAFFE, THE SUBMARINE ARM, WAS FRAUGHT WITH PERIL”

merchantmen, identify the cargo, allow the crew to abandon ship and provide assistance prior to seizing or sinking their quarry. The German declaration of unrestricted submarine warfare had contributed to the entry of the United States into World War I, and Germany wanted to avoid such a situation as long as possible this time.

On 3 September 1939 the U-30, commanded by Kapitanleutnant Fritz-Julius Lemp, sank the British passenger liner Athenia. Echoes of the Lusitania attack brought additional restrictions on U-boats, but as the war in the Atlantic gained momentum Dönitz became increasingly aware that surfaced U-boats exposed themselves to the fire of armed merchant ships and Royal Navy warships, as well as attack from enemy aircraft. Additionally, radio operators aboard some merchant vessels immediately transmitted the signal 'SSS', which meant that the ship was under attack by a U-boat. In the admiral's mind this voided the rule of maritime law since the German submarine was then put at high risk.

The most frustrating aspect of the early U-boat combat experience was that their numbers were too few to fully implement Dönitz's preferred offensive system, 'Rudeltaktik', or the 'wolfpack'. With enough U-boats available, he had envisioned up to 15 submarines grouping

"DESPITE THE INABILITY TO RAPIDLY INTRODUCE WOLFPACK TACTICS ON A BROAD SCALE, EARLY U-BOAT SUCCESSES SHOOK THE ROYAL NAVY"

to attack an Allied convoy, stretching any escorting warships to breaking point and inflicting maximum damage. A wolfpack was to patrol a particular zone of the vast Atlantic, covering a portion of an established convoy route. Once a submarine discovered a convoy, it would shadow the merchant ships and raise a radio advisory to headquarters, Befehlshaber der Unterseeboote (BdU), which

would in turn alert other boats in the area. When enough attackers were assembled to exploit the opportunity, headquarters would give permission to attack. Each U-boat could then act independently. Wolfpacks preferably struck at night and on the surface, launching torpedoes from distances of approximately 600 metres or in the midst of the ships at point-blank range, adhering to the Dönitz dictum, "Get in as close as possible".

Despite the inability to rapidly introduce wolfpack tactics on a broad scale, early U-boat successes shook the Royal Navy. On 17 September 1939 U-29, commanded by Korvettenkapitan Otto Schuhart, sank the aircraft carrier HMS Courageous off the coast of Ireland. A month later Kapitanleutnant Günther Prien executed the most daring submarine manoeuvre of the war. On the night of 14 October he guided U-47 through the block ships and cables supposedly safeguarding the expansive anchorage of the Home Fleet at Scapa Flow in the Orkney Islands, sank the battleship HMS Royal Oak moored in the harbour and escaped into the North Sea.

Prien was summoned to Berlin for a personal audience with Hitler, awarded the Knight's Cross and became a national hero.

The game changes

Meanwhile, Dönitz was anxious to employ his wolfpack tactics on a grand



ADMIRAL KARL
DÖNITZ, UBOOTWAFFE
COMMANDER, LOST
TWO SONS DURING
WORLD WAR II. ONE OF
THEM, PETER, DIED
WHEN U-954 WAS
SUNK IN THE NORTH
ATLANTIC IN 1943.
THE OTHER, KLAUS,
WAS KILLED ABOARD A
PATROL BOAT.

"WITH ENOUGH U-BOATS
AVAILABLE, HE HAD
ENVISIONED UP TO 15
SUBMARINES GROUPING TO
ATTACK AN ALLIED CONVOY,
STRETCHING ANY ESCORTING
WARSHIPS TO BREAKING
POINT AND INFLECTING
MAXIMUM DAMAGE"

Admiral Karl Dönitz
led the U-boat arm
of the Kriegsmarine
during World War II and
succeeded Hitler as
leader of the Third Reich



THE PEAK MONTH FOR U-BOAT LOSSES IN THE WAR WAS APRIL 1945, WHEN 48 BOATS WERE SUNK.



scale. Although the first co-ordinated U-boat attacks against British convoys were conducted as early as 1939, numbers were inadequate. He had outlined his plan for the wolfpacks to decimate enemy shipping in a memorandum to Admiral Raeder and noted that 300 operational U-boats would be needed to carry it out, given the fact that some would be active while others were either in transit or undergoing repairs.

Dönitz's critics point to his fixation on the tonnage of merchant shipping sunk, and the necessity that German submarine production would be sufficient to augment his forces while Allied shipping construction failed to keep pace with losses inflicted by the U-boats. Neither premise materialised. Dönitz also lacked the vision to implement better technology earlier in the war. His Type VII U-boats had limited range, reducing their effectiveness across thousands of miles of ocean. Construction of longer-range Type IX and Type XXI boats came too late.

Early U-boat production actually crept upwards: only 18 had been completed in 1939, followed by 50 in 1940 and 199 in 1941. Along with these growing numbers, German successes on the battlefield yielded a tremendous advantage. The conquest of Norway and France in the spring of 1940 brought new bases with ready access to the Atlantic – in some cases 725 kilometres (450 miles) closer to the shipping lanes than bases in the Baltic and North Sea. Soon, the French ports of Bordeaux, Lorient, St. Nazaire, La Rochelle and Brest were beehives of construction. Concrete submarine pens were built to shelter the U-boats. Wolfpack tactics were further developed and refined with the benefit of wartime experience.

While its performance in the Norwegian Campaign had been disappointing and its few successes had cost the U-boat arm four precious submarines, Dönitz re-energised

Above: U-97 arrives back in St. Nazaire naval base after a patrol in 1941. She was sunk by Australian aircraft in 1943

“THE MOST PROLIFIC U-BOAT COMMANDERS BEGAN TO RACK UP IMPRESSIVE RECORDS. KAPITANLEUTNANT OTTO KRETSCHMER, THE HIGHEST-SCORING U-BOAT ACE OF THE WAR, COMMANDED U-23 AND U-99 AND ACCOUNTED FOR 47 SHIPS AND 273,043 TONS”

ORIGINS OF THE RUDEL TAKTIK

VARIATION ON A GREAT WAR THEME

The introduction of the convoy system in World War I effectively countered the U-boat effort to cripple the Allied merchant marine, and as the conflict finally waned German submarines began assembling in small groups to attack targets. Successes were few due to efficient escort vessels and limited communications capabilities, while the number of available U-boats was insufficient. Although the Treaty of Versailles dismantled the U-boat force after World War I and the primary goal of the Kriegsmarine was initially one of clandestine rebuilding, there was discussion surrounding a group attack theory.

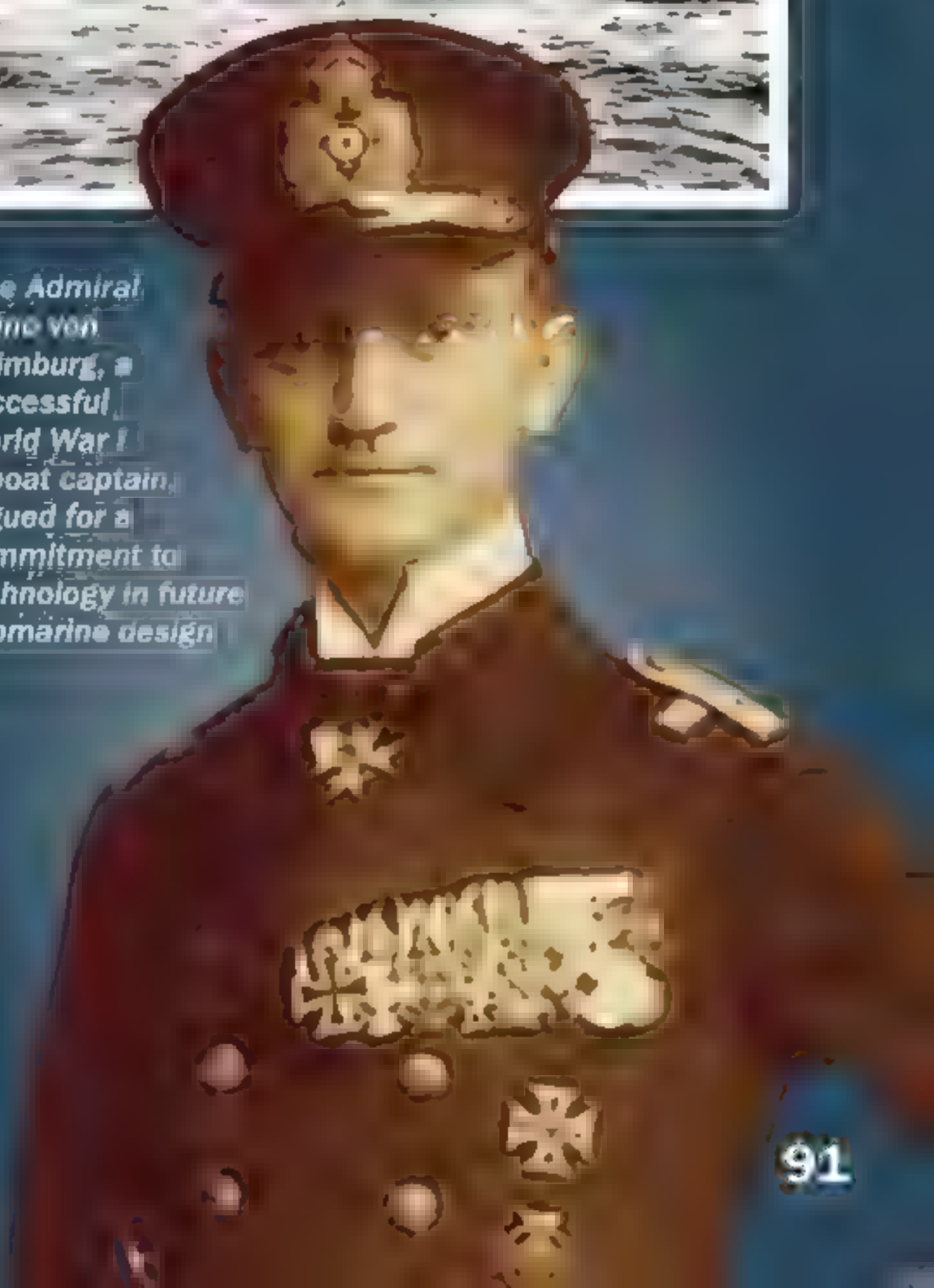
Debate often centred on the group attack tactic versus strides in technology that might make the U-boat a more formidable foe. The tacticians held sway. Admiral Karl Dönitz, commander of the Uboatwaffe, was consumed by the concept of the wolfpack, but the backbone of the U-boat fleet, the Type VII, was not appreciably more advanced than the submarines that had gone to war a generation earlier. When Dönitz assumed command of the Uboatwaffe in 1936 training in group tactics was one of his primary tenets.

To facilitate the wolfpack tactic and prosecute a 'tonnage war', Dönitz was required to rely on sufficient production of U-boats, the availability of trained crews and cooperation from the Luftwaffe in providing reconnaissance. Each of these developed slowly, sometimes grudgingly or not at all, delaying the implementation of the wolfpack tactic and limiting its potential to deliver victory in World War II.

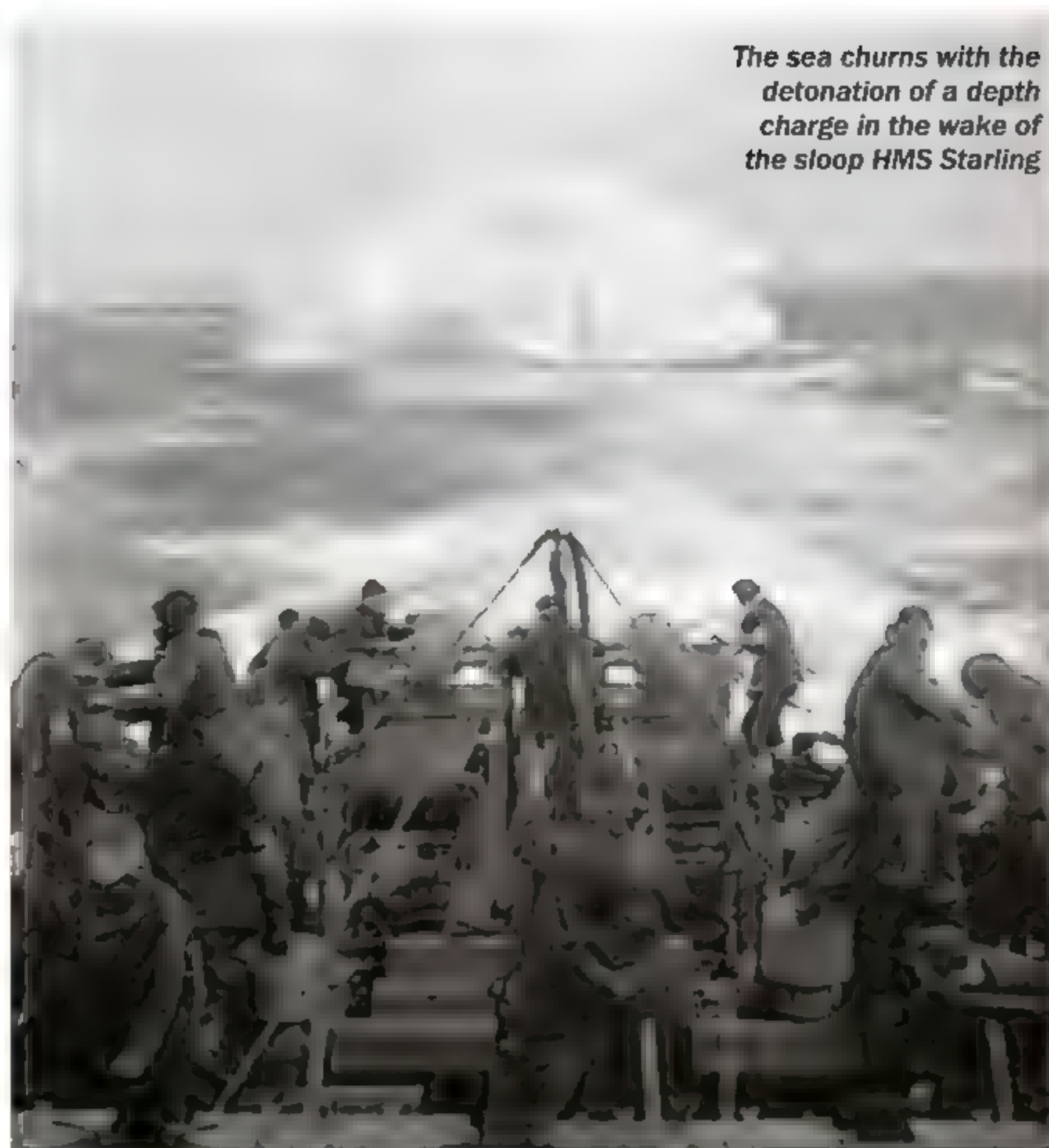
U-52, a Type VII-B submarine of the Kriegsmarine launched in late 1938, was scuttled at Danzig on 3 May 1945



Vice Admiral Heinz von Helmburg, a successful World War I U-boat captain, argued for a commitment to technology in future submarine design



The sea churns with the detonation of a depth charge in the wake of the sloop HMS Starling



An American dive bomber flies above a convoy off the South African coast in November 1941, before US entry into the war

his command. In 1940 resurgent marauders sank 30 merchant ships, totalling more than 284,000 tons in June. During the so-called 'Happy Time' – six months of unprecedented successes that followed – U-boats sank 282 ships and 1,489,795 tons of cargo. Despite the successes, that autumn the Uboatwaffe remained capable of deploying only seven or eight submarines at a time.

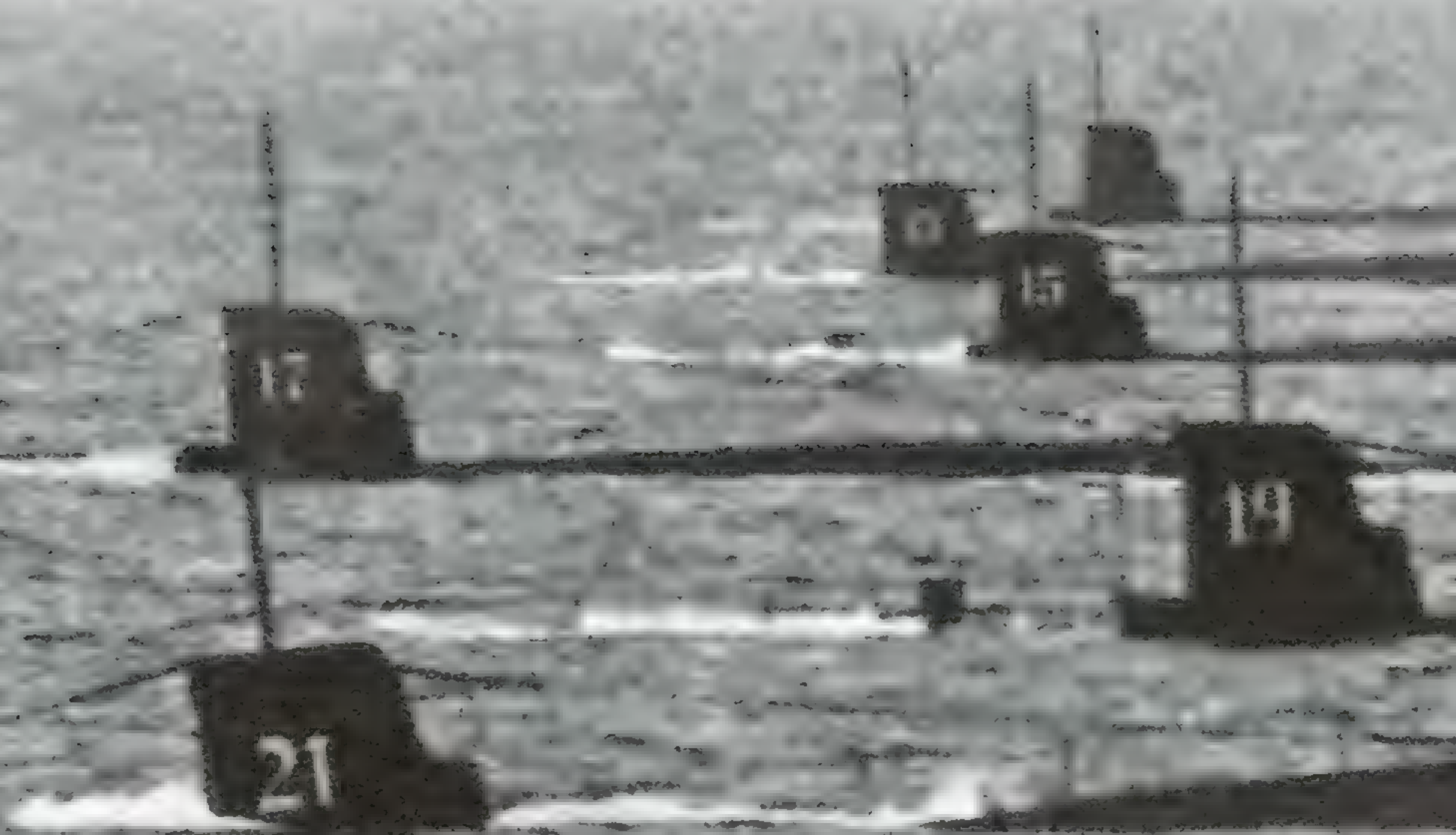
Information from B-Dienst, German naval intelligence, helped to locate convoys, and intrepid U-boat commanders scored remarkable successes. During a 30-hour killing spree in late October, two wolfpacks of only ten U-boats decimated Convoys SC 7 and HX 79, sinking 29 ships without loss.

The most prolific U-boat commanders began to rack up impressive records. Kapitanleutnant Otto Kretschmer, the highest-scoring U-boat ace of the war, commanded U-23 and U-99, and accounted for 47 ships and 273,043 tons.

He was taken prisoner when U-99 was sunk on 17 March 1941 during a wolfpack attack on Convoy HX 112, eastbound from Halifax in Nova Scotia to Liverpool. Kapitanleutnant Wolfgang Lüth commanded multiple boats, including U-43 and U-181, and ended the war with 46 ships and 225,204 tons sunk. Fregattenkapitan Erich Topp sank 35 ships and 197,460 tons while commanding U-57 and U-552.

Kapitanleutnant Joachim Schepke emerged as a hero during the Happy Time, sinking five ships in only three hours during one attack. Handsome and gregarious, Schepke gained fame commanding U-100 and lost his life in action on 17 March 1941 during the same wolfpack assault that resulted in Kretschmer's capture. On 15 March Fritz-Julius Lemp, commander of U-110, spotted HX 112 and sent a signal for the grey wolves to rally. Four U-boats – U-99, U-100, U-37, and U-74 – responded. After dark, Schepke manoeuvred

A U-boat flotilla heads out to patrol
along the important Atlantic shipping
lanes in 1939



ON 4 JUNE 1944, THE U-505
BECAME THE FIRST ENEMY
WARSHIP CAPTURED
ON THE HIGH SEAS BY
THE US NAVY, SINCE THE
WAR OF 1812, TAKEN BY A
HUNTER-KILLER GROUP
IN THE ATLANTIC. TODAY,
THE SUBMARINE IS ON
DISPLAY AT THE MUSEUM
OF SCIENCE AND INDUSTRY
IN CHICAGO.

“WOLFPACKS PREFERABLY STRUCK AT NIGHT AND ON THE SURFACE, LAUNCHING TORPEDOES FROM DISTANCES OF APPROXIMATELY 600 METRES OR IN THE MIDST OF THE SHIPS AT POINT-BLANK RANGE”



British officers inspect a Hedgehog anti-submarine weapon installed on an escort ship. The Hedgehog was effective against U-boats at shallow depths



Left: Officers on the bridge of a Royal Navy destroyer keep watch while on convoy escort duty in the Atlantic in October 1941



U-100 within range of a large tanker and damaged it with a torpedo. Kretschmer, meanwhile, sank four tankers and a freighter in less than an hour. He followed that up with the sinking of another freighter within 15 minutes as he stalked the central column of the convoy and then made good his temporary escape.

But Schepke's luck was running out. The 41-ship convoy was escorted by six destroyers and corvettes, and they prowled the night, catching U-100 on the surface. At around 1.30am Schepke ordered his crew to crash dive. However, the destroyer HMS Walker was hot on the trail and laid a pattern of depth charges at close range. Schepke's boat shook and shuddered, sustaining damage. About 90 minutes later he brought the stricken U-100 back to the surface, only to see the destroyer HMS Vanoc bearing down, ready to ram.

Vanoc, the first to use shipboard radar at night to locate an enemy submarine, sliced into the hull of U-100, dealing a deathblow and crushing Schepke against his periscope as the submarine sank. 37 other crewmen died with U-100; only six survivors were picked up. Kretschmer and U-99 fell victim to Walker, which picked up the submarine on ASDIC, an underwater sound detection system developed during World War I, and damaged the U-boat

with depth charges, forcing it to surface. Other escorts riddled U-99 with gunfire. As the submarine sank, Kretschmer and most of his crew were scooped from the sea.

After losing six ships and 50,000 tons of cargo, Convoy HX 112 continued without further incident, arriving at Liverpool on 20 March. The loss of two U-boat aces was a serious blow to the Kriegsmarine, compounding the melancholy accompanying the death of Günther Prien, hero of Scapa Flow, during an attack on Convoy OB 293 en route from Liverpool to North America. On the night of 6 March a wolfpack of four U-boats – U-47, U-99, U-70 and U-A (formerly

a Turkish submarine built in Germany) – moved against convoy OB 293 in the Western Approaches in the Atlantic.

Prien made the rallying call, stalked the convoy and attacked after dark. The wolfpack sank four ships and damaged a fifth. However, the response from the escorts was devastating. The corvette HMS Camellia sank U-70 on 7 March, while the destroyer HMS Wolverine has been credited with depth charging U-47 and killing Prien. Some researchers conclude that Wolverine attacked U-A, which limped back to port, but the actual cause of U-47's demise is shrouded in conjecture and possibly attributable to damage followed by a diving accident.

"PRIEN MADE THE RALLYING CALL, STALKED THE CONVOY AND ATTACKED AFTER DARK. THE WOLFPACK SANK FOUR SHIPS AND DAMAGED A FIFTH. HOWEVER, THE RESPONSE FROM THE ESCORTS WAS DEVASTATING"

Countermeasures and consternation

As the Happy Time waned, it was becoming apparent that Britain was developing better technology and defences against the wolfpacks, while the Kriegsmarine continued to emphasise tactics. In addition to ASDIC, better training of convoy escort crews, the proliferation of shipboard radar, the commitment of long-range aircraft from Royal Air Force Coastal Command and later the US Navy and Air Forces, and the development of better weapons such as the 'Hedgehog' contributed to mounting U-boat



Above: A shell from the deck gun of a U-boat strikes a merchant ship that has already taken a torpedo hit



A U-boat's periscope was a vital piece of equipment to maintain the element of surprise when stalking ships



Above: The battleship Barnham explodes after being torpedoed by U-351 in November 1941

Left: A U-boat periscope reveals the devastation wrought on an Allied ship by a torpedo in 1942

THE ACTUAL CAUSE OF U-47'S
DEMISE IS SHROUDED IN
CONJECTURE AND POSSIBLY
ATTRIBUTABLE TO DAMAGE
FOLLOWED BY A DIVING ACCIDENT

25 20 15 10 5 5 10 15 20 25

AN ITALIAN WOLFPACK?

SUBMARINES OF THE REGIA MARINA



In the spring of 1940 the Italian navy, the Regia Marina, possessed nearly 120 submarines, although their capabilities were deficient compared to those of their German allies. After the fall of France, Italian submarines moved to ports on the Atlantic, establishing a base at Bordeaux. Their performance was disappointing early in the war as ten submarines were lost in the first three weeks, and only about 30 Italian submarines were operating at sea at any time in the conflict.

During the course of the Battle of the Atlantic, Admiral Karl Dönitz, commander of the German Ubootwaffe, attempted to blend Italian submarines into the wolfpacks that stalked the Atlantic seaways. The results were disappointing, due to performance issues. Italian submarines were relatively slow and cumbersome. Most of their combat experience was conducted during individual cruises in the South Atlantic and the Mediterranean. In the Atlantic, Italian submarines sank 109 Allied merchant ships and 593,864 tons of cargo.

The most successful Italian submarine of World War II was the *Leonardo da Vinci*, under the command of Gianfranco Gazzana Priaroggia, the highest-scoring Italian submarine commander of the conflict. *Leonardo da Vinci* sank 17 ships and 120,243 tons of cargo, including the 21,500-ton passenger liner *Empress of Canada*, before falling victim to the destroyer HMS *Active* and frigate HMS *Ness* off the coast of Spain on 22 May 1943. All hands were lost. At least 88 Italian submarines were sunk during World War II.

The *Leonardo da Vinci* was the most successful Italian submarine of World War II, sinking 17 Allied ships



losses. The Hedgehog, which threw up to 24 bomblets in a pattern to increase the likelihood of a hit, was introduced in 1942 and credited with sinking 47 U-boats. Hunter-killer groups were formed to search and destroy U-boats – the one-time hunters becoming the quarry.

One of the most significant anti-submarine defences introduced was High Frequency Direction Finding, or Huff-Duff, which utilised intercepted U-boat radio traffic, usually between boats at sea and headquarters, to pinpoint the positions of enemy submarines. Huff-Duff employed two frequency interception locations, land-based or at sea, assessing the slightly different signals to determine a bearing. By the summer of 1942 U-boats were being caught on the surface at night without warning. Suddenly the ominous buzz of aircraft engines would be heard, the powerful 22-million candela Leigh Light stabbed through the darkness, and the illuminated submarine was pounded by bombs and riddled with machine gun fire. In the month of July, 12 U-boats were sunk. Nine were sent to the bottom in August, and during the next three months 39 were destroyed. Huff-Duff is believed to have contributed to nearly 25 per cent of all U-boat sinkings.

Eventually, as the number and expertise of convoy escorts and the deployment of improved anti-submarine defences continued to increase, U-boat losses reached staggering and unsustainable proportions. While 86 U-boats were lost in 1942, losses nearly tripled in 1943

to 241, with 42 in May alone and 38 in July. A total of 234 U-boats sunk or scuttled in 1944. Compounding the difficulties for the U-boats, British cryptanalysts had managed to break the German radio communications encrypted with the Enigma machine.

The capture of U-110 along with an intact Enigma machine and other cryptologic information by the destroyers HMS *Bulldog* and HMS *Broadway* and the corvette HMS *Aubretia* on 9 May 1941 facilitated the breakthrough. Lemp, captain of U-110, was shot dead by a member of the Royal Navy boarding party. The decrypted German messages were given the code name 'Ultra', and by July the first application of Ultra intelligence contributed to a dramatic drop in merchant tonnage lost – from over 310,000 in June to 94,209.

From drumbeat to destruction

As Dönitz repeatedly tried to establish U-boat 'critical mass' in the North Atlantic, the demands for support of operations in North Africa diverted strength from the primary effort. While results improved dramatically, with 292,829 tons sunk in September 1941 as U-boats attacked convoys bound to and from Gibraltar, the gateway to the Mediterranean was also the scene of the first dramatic, clear-cut British victory over a U-boat wolfpack.

In December 1941 Convoy HG 76, bound for the British Isles from Gibraltar under the protection of the 36th Escort Group, was set



A U-boat crew and officers hold a meeting in the bow of their vessel in 1939. The claustrophobic conditions made a strong bond between the crew vital

"THE MEDITERRANEAN WAS ALSO THE SCENE OF THE FIRST DRAMATIC, CLEAR-CUT BRITISH VICTORY OVER A U-BOAT WOLFPACK"

upon by a wolfpack soon after clearing the harbour. A four-day running battle ensued. Captain Johnnie Walker led the 17 escort vessels, including the escort aircraft carrier Audacity. On the morning of the 17 December U-131 was sunk in a combined effort of aircraft from Audacity and escort vessels. The next day U-434 was sunk. Shortly afterwards, U-574 torpedoed and sank the destroyer HMS Stanley. Walker's own ship, the sloop Stork, rammed and sank U-574. For good measure, the escorts sank U-567 the next day. Partially due to the incompetence of its captain, Audacity was torpedoed and sunk by U-751 on 21 December.

Despite the loss of Audacity and Stanley, five U-boats – half the attacking wolfpack – had been sunk, and other U-boats had sustained damage. Only two of the 32 HG 76 merchantmen were sunk. After news of the defeat reached Dönitz, 1941 ended amid an air of gloom at U-boat headquarters.

After US entry into World War II on 11 December 1941 a handful of U-boats were dispatched to the east coast of the United States, and for a period of several months wreaked havoc on American shipping. The US

was totally unprepared to defend against submarines. Dubbed Operation Drumbeat, the U-boat assault devastated merchant shipping from New England to Florida and into the Caribbean. In March 1942 95 ships were sunk, totalling over 530,000 tons. When the US Navy and Coast Guard finally implemented the convoy system, enforced blackout rules and stepped up coastal patrols, the diminishing return compelled Dönitz to recall his wolves. During the 'Second Happy Time' from January to August 1942, U-boats sank 609 ships carrying 3.1 million tons of cargo. Redoubled American anti-submarine efforts helped to account for the sinking of 86 U-boats in 1942.

In the autumn of that year wolfpacks scored renewed successes in the Atlantic and Mediterranean. Convoy escorts were fewer due to the demands of

A Nazi propaganda cartoon depicts Stalin being speared by a U-boat, as the U-boat campaign sunk ships carrying weapons and supplies to the Soviets



THE HUNTING GROUND THE GREY WOLVES ROAMED THE OCEANS LOOKING FOR ALLIED PREY

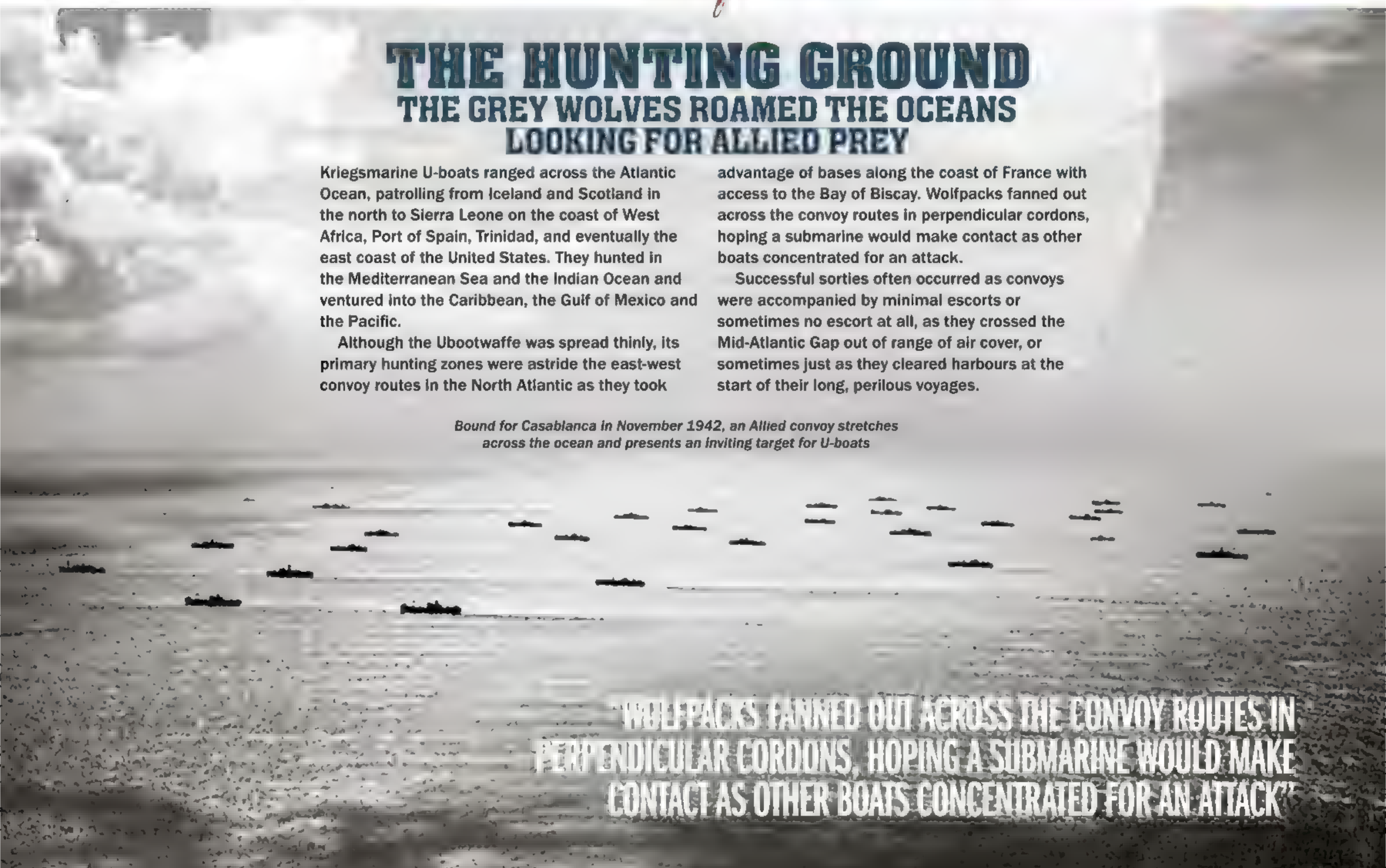
Kriegsmarine U-boats ranged across the Atlantic Ocean, patrolling from Iceland and Scotland in the north to Sierra Leone on the coast of West Africa, Port of Spain, Trinidad, and eventually the east coast of the United States. They hunted in the Mediterranean Sea and the Indian Ocean and ventured into the Caribbean, the Gulf of Mexico and the Pacific.

Although the Ubootwaffe was spread thinly, its primary hunting zones were astride the east-west convoy routes in the North Atlantic as they took

advantage of bases along the coast of France with access to the Bay of Biscay. Wolfpacks fanned out across the convoy routes in perpendicular cordons, hoping a submarine would make contact as other boats concentrated for an attack.

Successful sorties often occurred as convoys were accompanied by minimal escorts or sometimes no escort at all, as they crossed the Mid-Atlantic Gap out of range of air cover, or sometimes just as they cleared harbours at the start of their long, perilous voyages.

Bound for Casablanca in November 1942, an Allied convoy stretches across the ocean and presents an inviting target for U-boats



"WOLFPACKS FANNED OUT ACROSS THE CONVOY ROUTES IN PERPENDICULAR CORDONS, HOPING A SUBMARINE WOULD MAKE CONTACT AS OTHER BOATS CONCENTRATED FOR AN ATTACK"



Above: With their U-boat forced to surface and surrender, German crewmen awaiting rescue cluster on the conning tower as an Allied warship approaches

Operation Torch, the Allied invasion of North Africa. Wolfpacks ravaged convoys in October and November, sinking more than 100 ships in each month and destroying 619,417 and 729,160 tons of shipping respectively. The November total was an all-time high.

In early 1943 pitched battles raged across the mid-Atlantic and the Western Approaches. Convoys were particularly vulnerable while sailing through the Mid-Atlantic Gap, also known as the 'Black Hole', an expanse of ocean initially beyond the range of RAF Coastal Command air cover. Before the gap was closed with longer-range aircraft that spring, losses were at times prohibitive. In February and March 1943 U-boats sank 359,328 and 627,377 tons of shipping in the Atlantic. However, 18 U-boats were destroyed in February alone.

The realisation that the U-boat war against the Allies was lost came abruptly. Within weeks of the spring triumphs, roles were reversed. In May 1943 Dönitz lost a staggering 41 U-boats while only 264,853 tons of shipping was sunk. Such losses were unsustainable, and the wolfpacks were recalled. Although the Allies had won the Battle of the Atlantic, German submarines continued to fight and periodically claimed Pyrrhic victories right up until the end of the war.

Whither the wolfpack

The legend of the wolfpack conjures up great tales of derring-do. Despite Churchill's concerns, though, a closer look may lead observers to draw conclusions that are different from those a post-war generation of historians has traditionally embraced.

U-boat forays were never mounted in war-winning numbers, although in the spring of 1941 their sorties were enough to raise considerable concern. Dönitz placed his emphasis on tactical solutions to problems, while the implications and benefits of over-arching technological advances apparently

escaped him, ultimately proving fatal to the wolfpack offensive.

While they concentrated U-boat striking power, wolfpacks also presented multiple targets in a compact operational zone as convoy escorts and other countermeasures steadily grew in lethality. Wolfpack operations depended on radio communication, often compromising surprise and summoning swift retribution. Torpedo malfunctions and limited improvements in U-boat technical performance drove Dönitz and his senior commanders, as well as captains and crews with their lives on the line, to distraction. Then there was the vastness of the Atlantic itself. Allied convoys could still sail the sea undetected. Opportunities were lost and with them the Battle of the Atlantic.

The numbers speak for themselves. Captured U-boat war diaries revealed the startling reality that many German submarines spent entire patrols without making contact with a convoy. Fewer than 800 combat patrols – under 30 per cent of the 2,700 sorties conducted – actually produced contact. Only 30 of nearly 3,300 merchantmen bound for British ports were sunk during the first eight months of 1942. During the first 42 months of the war, over 70 per cent of the ships sunk by U-boats were either sailing alone or lagging behind their assigned convoys. Of the 620 ships sunk while transiting in convoys, only 16 were lost when the convoys were protected by both naval escort and air cover. In sharp contrast, 65 per cent of all U-boat losses in World War II were inflicted by convoy escorts.

Without doubt, the wolfpack earned its place in history. However, an unbiased evaluation of its performance strongly suggests a less than stellar record – one that never really brought Britain to the brink of defeat. Nevertheless, the exploits and sacrifice of those who fought the Battle of the Atlantic, both Allied and Axis, raised the wolfpack to mythical status, and these intrepid men are worthy of remembrance.



"U-BOAT FORAYS WERE NEVER MOUNTED IN WAR-WINNING NUMBERS, ALTHOUGH IN THE SPRING OF 1941 THEIR SORTIES WERE ENOUGH TO RAISE CONSIDERABLE CONCERN"

A U-boat feels the force of an attack from a US Navy plane in the Atlantic

Images: Alamy, Getty

STALIN

NAZI GRAVEYARD

During the final months of this deadly struggle, an entire army would crumble and the fortunes of war would permanently turn against Nazi Germany

WORDS NIK CORNISH

*The Battle of Stalingrad
lasted for several
months from 1942 until
February 1943*

VOLGAGRAD

It had not been one of the major objectives of the Axis' summer offensive of 1942, but by September that year Stalingrad had become the focal point of the Eastern Front, as its defenders simply refused to give up. This led to an increasing number of German troops being committed to its reduction. However, by 16 November 1942, what was to be the Sixth German Army's final, desperate attempt to push the battered remains of the city's defenders from their blood-soaked footholds on the western bank of the Volga River, ended.

Stalingrad was a model garden and industrial city that ran for 40 kilometres (25 miles) along

the western bank of the unbridged Volga River, which at some points reaches a width of 1,500 metres (4,900 feet). At roughly eight kilometres (five miles) wide, the city was long and narrow, and was home to some 400,000 people.

Much of the population worked in the large factory district located in the northern part of the city. Here the Dzerzhinsky tractor factory, Red October steel works, Silikat factory and the Barrikady artillery factory dominated the city's landscape.

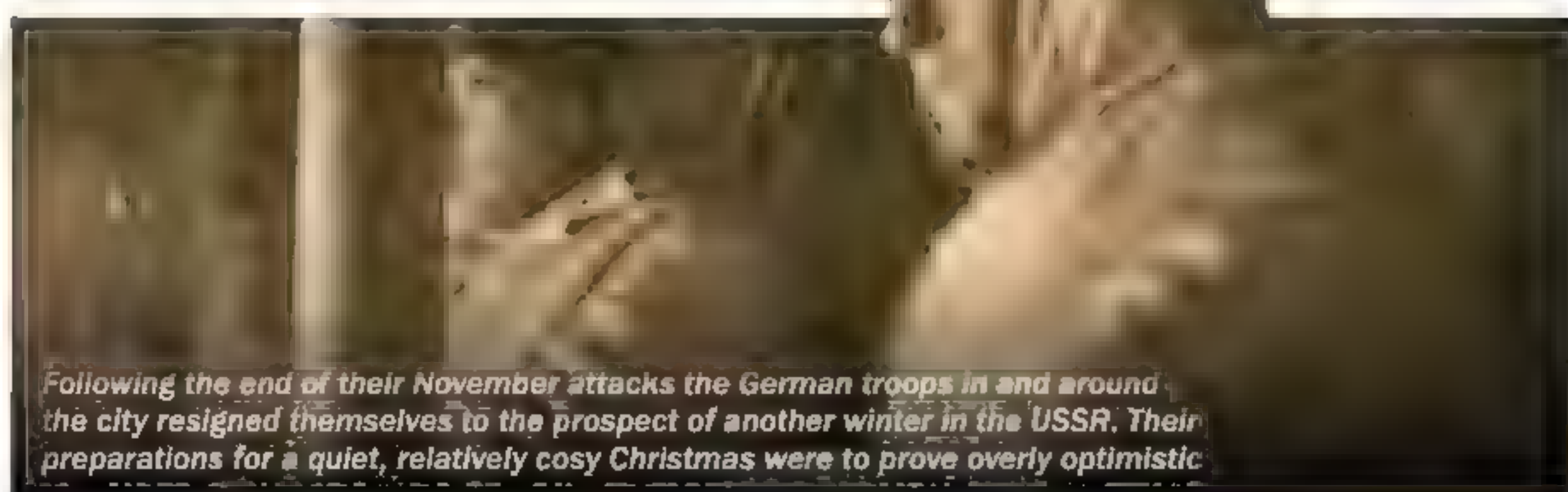
South of the city centre, the area was overlooked by the 102-metre (335-feet) high ancient burial mound Mamayev Kurgan, control of which would allow one side or the other the

perfect artillery position from which to dominate the city. Just to the south of the Mamayev Kurgan, near to the main ferry landing point, the Tsaritsa River ran along a narrow gorge into the Volga at 90 degrees. Beyond the city's suburbs the steppe stretched, undulating gently in all directions and rising gently to the west, where it met the Don River over 100 kilometres (62 miles) away.

Defending the rubble of central and northern Stalingrad were the men of the 62nd Army, commanded by Lieutenant General V.I. Chuikov; to the south, a less industrialised area, was the 64th Army led by Major General M.S. Shumilov. By mid-November the Soviet troops in the city

"STALINGRAD HAD BECOME THE FOCAL POINT OF THE EASTERN FRONT AS ITS DEFENDERS SIMPLY REFUSED TO GIVE UP"





Following the end of their November attacks the German troops in and around the city resigned themselves to the prospect of another winter in the USSR. Their preparations for a quiet, relatively cosy Christmas were to prove overly optimistic

The assembly of men and machines for Operation Uranus was carefully undertaken. Movement into assembly areas took place mainly at night or during periods of bad weather. During October all civilians, other than those engaged in construction work, were evacuated as a further security measure



Outside of Stalingrad the Soviets had been building up two groups of armies. To the north was the Southwestern Front, to the south the Stalingrad Front. Don Front lay between them. Stalingrad's defenders, 62nd and 64th Armies were assigned to Stalingrad Front. Up to 700,000 men and 1,300 tanks now waited for orders

were reduced to holding pockets of varying sizes, like islands adrift in a sea of rubble, often connected only by the Volga, across which all their meagre supplies and reinforcements arrived. Yet, by some supreme act of desperation, bravery and tenacity they held on, grinding down their attackers in conditions that resembled those of Verdun.

Facing them, the German Sixth Army, under Lieutenant General Friedrich Paulus, and part of Army Group B (a sub-division of AGS) commanded by Colonel General Max von Weichs, had pushed eastwards from the city's outskirts, coming to within 500 metres (1,640 feet) of the Volga. There they had stalled, trapped in a nightmare landscape of their own air and artillery attacks' creation. Dependant on a supply line that stretched across the steppe to the Don River bridgeheads, particularly the railway crossing at Kalach 72 kilometres (45 miles) away, Sixth Army was exhausted but still anticipated victory. But they were unaware of the extent of the Soviet forces concentrating on their flanks.

Soviet planning

Planning for an ambitious counteroffensive in the Stalingrad area had been underway since 12 September. At a conference in Moscow, General of the Army GK Zhukov and Colonel General AM Vasilevsky suggested to Stalin that Sixth Army be encircled by thrusts through the left and right flanks that were defended by the Third and Fourth Romanian Armies respectively. Both Romanian forces were weak in armour and anti-tank weapons and were holding positions that were vulnerable and made poor use of the terrain. Armoured forces were to break through the Romanians, drive

across the steppe and then link up at Kalach. The distance to be covered by the northern arm was 128 kilometres (80 miles), the southern 97 kilometres (60 miles). Southwestern and Don Fronts (under commanders Lieutenant General NF Vatutin and Lieutenant General KK Rokossovsky respectively) were to comprise the northern thrust and Stalingrad Front would perform the southern thrust.

When the encirclement was complete, part of the force would face inwards to contain Sixth Army, and part outwards to prevent any relief effort that, it was anticipated, would come from the southwest. Stalin gave the plan his backing within 24 hours of its proposal. Code-named Operation Uranus, its start date was to be 9 November. In order to assemble the vast amount of men, weapons and supplies needed, it was decided that Stalingrad's defenders would only be allowed a minimum of reinforcements: everything possible was to be sent to the flanks.

Intelligence discounted

The Romanian Third Army, aware of some sort of Soviet build-up, requested permission in late October to liquidate the Soviet bridgeheads over the Don River at Serafimovich and

"THERE THEY HAD STALLED, TRAPPED IN A NIGHTMARE LANDSCAPE OF THEIR OWN AIR AND ARTILLERY ATTACKS' CREATION"

Kletskaaya, but the request was refused.

German intelligence was convinced that the major Soviet offensive of the winter would be directed at Army Group Centre, which still threatened Moscow. Furthermore, Stalingrad itself appeared to be on the brink of capture and all Sixth Army's resources were focused on that objective. Romanian Fourth Army, to the right, was equally concerned at Soviet movements and build-up, but these concerns were also dismissed.

To an extent the Soviets had contributed to this by a series of poorly prepared counterattacks made to the north of the city during October that had been easily repulsed, giving Sixth Army a false sense of security. Indeed, Hitler himself scoffed at the possibility of the Red Army carrying out anything approaching a major operation, as he regarded it as a spent force awaiting the coup de grace shortly to be delivered. However, Sixth Army's intelligence staff did warn Paulus of a Soviet build-up, but their concerns were felt to be overly pessimistic and were discounted. It was a classic case of underestimating the enemy.

Third Romanian Army declared that a Soviet attack was due on 7-8 November, 25 years after the Bolshevik Revolution. Although nothing happened, Luftwaffe reconnaissance flights backed up the Romanians' concerns – the Soviets were increasing their forces to the north of the city. Hitler agreed to reinforce the Romanians with XXXVIII Panzer Corps's 14th and 22nd Panzer divisions and First Romanian Armoured Division. But these units were understrength and lacked both modern tanks and fuel. Nevertheless, it looked like a powerful force – at least at Hitler's HQ if not out on the steppe. When General Hermann

SIXTH ARMY POWs

PRISONERS FACED A BLEAK FUTURE AS THEY WERE HERDED TOGETHER

It had taken the Soviets some time to realise the numbers trapped in the Stalingrad pocket. Consequently there was a degree of confusion over the numbers actually captured. There is no doubt that many Axis troops were summarily executed during the fighting as a reaction to the conditions many Soviet troops had seen their own men kept in as POWs. Furthermore, of the large number of Hiwis, many attempted to melt into the chaos. A figure that is generally accepted for Axis POWs is 91,000.

As Paulus underwent interrogation and had his staff car confiscated, his hungry, exhausted and sick men stumbled across the river they had bled to reach. Thousands died of malnutrition, frostbite and mercy shots as they were herded eastwards to camps that they were often expected to build for themselves. As their former commanders bickered and took positions that either damned or supported their government, their men continued to die.

POWs crossing the frozen waters of the Volga



The POWs were divided by nationality, and the non-Germans were treated marginally better and placed in positions of power over their former allies. Inevitably there was dissent. Of the 45,000 who survived into the spring and summer, work was the only way to ensure some hope of a return home. Those with building skills were set to rebuild towns and cities ruined by the war or for party apparatchiks in Moscow, where their work was highly valued. In 1955 only 5,000 Stalingrad veterans returned to Germany.

“IN 1955, ONLY 5,000 STALINGRAD VETERANS RETURNED TO GERMANY”

The legacy of Stalingrad: Axis corpses await burial on the outskirts of the city





In the city patrolling continued. A nicely posed shot of Germans moving cautiously through the Red October steel works provided the media at home with optimistic propaganda for civilian consumption.

Below: The dispersal of German armoured formations and the use of Panzer crews as infantrymen in Stalingrad contributed to the slow response to Soviet breakthroughs. Fuel and ammunition were to be collected from depots in the rear which were often either captured or destroyed by their fleeing defenders.

Below: Men and officers celebrate the link-up of Stalingrad and Southwestern Fronts at Sovietsky Farm 15 kilometres (nine miles) closer to Stalingrad on 23 November.

Below: Other bridges, such as that at Verkhachy, were still in German hands and it was for these that the Axis forces west of Stalingrad headed. However, a shortage of horses meant that a lot of equipment had to be abandoned.



Hoth, commanding Fourth Panzer Army – which included XXXXVIII Panzer Corps and VI Romanian Corps – voiced his concerns about the Soviet concentrations developing opposite VI Corps, he too was ignored. Hoth's five Romanian infantry divisions covered the line south from Stalingrad to Romanian Fourth Army's position. Again, to soothe his ally's nerves, Hitler sanctioned the issue of a small number of anti-tank guns and mines to Romanian Fourth Army.

Operation Uranus (North)

The build-up of Soviet forces for Operation Uranus took longer than anticipated, so Zhukov asked for a postponement of the attack and was granted ten days. On 18 November Chuikov was informed of the attack, and for his 62nd Army it came just in time, as the Volga was almost frozen to the point where it was too difficult for ships but too weak for foot soldiers or vehicles to cross.

As the ice floes ground downstream to their rear, Stalingrad's defenders had been split into three groups – two small pockets and the main one, which ran from the Red October steel works to the southern suburbs. When the frontoviki (front line men) heard the gunfire to the north during the morning of 19 November they did not believe the rumoured counteroffensive was underway. It was only when artillery fire was heard coming from the



south 24 hours later that they let themselves believe it was true.

The first victim of Operation Uranus was Third Romanian Army. At 8.50am Fifth Tank Army (Southwestern Front) struck at the junction of the Romanians' left flank, where it abutted the Italian Eighth Army. To the Soviet right, First Guards Army was positioned to prevent any Italian counterattacks. Four hours of desperate fighting resulted in a Soviet breakthrough with support from the Red Air Force as the morning mist rose. Alerted to the Soviet attack, Paulus's HQ was nevertheless unaware of its seriousness until later in the day. By then Soviet tanks of IV Tank Corps supported by III Guards Cavalry Corps were through IV Romanian Corps defences, supported to their right by Fifth Tank Army, which was reducing Romanian II Corps to a state of confusion. At Army Group B's HQ, Weichs ordered Paulus to halt operations in Stalingrad, "with the objective of moving forces

"FOUR HOURS OF DESPERATE FIGHTING RESULTED IN A SOVIET BREAKTHROUGH WITH SUPPORT FROM THE RED AIR FORCE AS THE MORNING MIST ROSE"



to cover the rear [left] flank of Sixth Army and secure lines of communication".

Convinced that Don Front's attack was the main threat, Weichs had ordered XXXXVIII Panzer Corps to drive to the Romanians' rescue. In effect Weichs was trying to assemble a mobile striking force to hold the Soviet armour, utilising virtually all of Sixth Army's Panzer and motorised divisions. However, 16th and 22nd Panzer Divisions were not ready to move, as their units were scattered and poorly supplied with ammunition and fuel. Consequently First Romanian Armoured Division's obsolete Skoda tanks were almost the only vehicles immediately available.

The Romanian armour ran into the T34s of XXVI Tank Corps and narrowly escaped complete destruction. Soviet armour and cavalry forces were under strict orders to avoid serious combat, their primary objective being to encircle Sixth Army, so they pushed ahead, leaving disorganised groups of Romanian defenders to be dealt with by the supporting infantry. The German infantry divisions north of Stalingrad were now forced to realign themselves westwards to cover their flanks and rear. German 376th Infantry Division was closest to the Romanians and began to bend to its left, as did the German 44th Infantry Division but, due to fuel shortages, this was a problematic manoeuvre and equipment had to be abandoned. During the next 24 hours

A Soviet 76mm infantry support gun prepares to fire. Pockets of resistance were left to be mopped up by follow-up units. Food and other supplies were sacrificed for fuel and ammunition.



“THE ROMANIAN ARMOUR RAN INTO THE T34S OF XXVI TANK CORPS AND NARROWLY ESCAPED COMPLETE DESTRUCTION”

these formations and 384th Infantry Division pulled back to the southwest and the Don. South of these units, 14th Panzer Division was attempting to determine the direction of the Soviet thrust while 22nd Panzer Division was falling back in the face of I Tank Corps.

To further complicate Army Group B's difficulties was the fronts their flanking divisions were trying to hold. In the case of Romanian Third Army this was 20-24 kilometres (12-15 miles). To the south, Romanian Fourth Army's right flank was patrolled by Eighth Cavalry Division, which was attempting to monitor a 150-kilometre (93-mile) line.

Operation Uranus (South)

Sixth Army HQ was situated 20 kilometres (12 miles) north of Kalach – the proposed Soviet junction point – at Golubinsky, unaware that Soviet tanks were within 30 kilometres (19 miles) of their position. During the course of 21 November it was decided to relocate to the rail junction of Gumrak, just west of Stalingrad, where there was also an airfield. However, during this movement a message came through ordering Sixth Army to “stand firm in spite of danger of temporary encirclement”, but was overlooked. Paulus's staff were not fully aware of the threat moving towards them from the southern pincer.

Stalingrad Front, under Colonel General AI Yeremenko, preceded its attack with a

THE AIRLIFT

THE EFFORTS TO CREATE HITLER'S PROMISED SKY BRIDGE FELL SHORT

Supplying the men and machines in the Stalingrad pocket by air began on 23 November. JU-52 transport planes flew into Pitomnik airfield (roughly 20 kilometres or 12 miles from central Stalingrad) mainly from Tatsinskaya 260 kilometres (160 miles) to the west. For a JU-52 the flight time was 75 minutes one way, but over three hours was required for unloading, refuelling and waiting time.

Despite the objections of local Luftwaffe commanders Goering would not explain to Hitler that the air bridge was unable to deliver the necessary tonnage of supplies. It was estimated that 300 tons per day would keep the garrison functioning, whereas 750 tons would enable it to perform at an operational capacity. This latter figure was revised down to 500 tons in light of experience. The reality was somewhat different. Even when He-III and FW-200 bombers were pressed into service to supplement the JU-52s the delivery of 300 tons was achieved only once.

Tatsinskaya was overrun by Soviet armour on 24 December. It was recaptured four days later. Flights were switched to airfields further west, extending the flight time. Up to 45,000 wounded were evacuated by air. Pitomnik fell on 17 January, and Gumrak became the main airstrip for six days, until it too was captured. The remaining airfield couldn't deal with landing loads. Supplies were parachuted in but not in sufficient quantities as the Luftwaffe refused to dye the sky in support of the



Above: A wrecked JU-52 at Tatsinskaya. Surprised by the attack, many aircraft took off but 72 (Luftwaffe figures) were destroyed on the ground. The Soviets claimed 300 destroyed including “a trainload of disassembled aircraft”. Whichever figure is correct, it was a heavy blow to the airlift.



Above: The Soviets placed batteries of anti-aircraft guns on the ground. These took a heavy toll on the Luftwaffe's aircraft.



"ON 18 NOVEMBER CHUIKOV WAS INFORMED OF THE ATTACK, AND FOR HIS 62ND ARMY IT CAME JUST IN TIME AS THE VOLGA WAS ALMOST FROZEN TO THE POINT WHERE IT WAS TOO DIFFICULT FOR SHIPS BUT TOO WEAK FOR FOOT SOLDIERS OR VEHICLES TO CROSS"

Soviet soldiers closed in on the surrounded Sixth Army, but found that the Germans had reorganised themselves into a dangerous defensive force





"PRIORITY WAS GIVEN TO GERMANS, AND MANY ROMANIANS WERE PUSHED ASIDE WITH THE BUTT OF A FELDGENDARME'S MACHINE PISTOL"

Soviet scouts, razvedchiki, check a building for enemy troops. The scouts were an elite among the infantry, provided with better clothes and weapons. Many Soviet infantrymen at this time lacked winter camouflage suits

45-minute bombardment on 20 November. As the gunfire died away the infantry rushed forward at 10.45am, supported by tanks of XIII Mechanised Corps. Soviet reports of the breakthrough suggested a mix of stolid Romanian defence and abject surrender, while nearby German observers noted that "masses of Soviet tanks... in quantities never seen before" were pouring across the snow into Fourth Romanian Army's positions.

The Soviet breakthrough came speedily: after only two hours Romanian VI Corps was approaching near collapse. The timely intervention of German 29th Motorised Infantry Division stabilised the situation briefly, but it was ordered to withdraw in order to protect Sixth Army's southern flank, leaving the battered Romanians to their own devices. By this point, virtually no organised defence lay between Stalingrad Front's armour and Kalach: only the problem of refuelling the Soviet T34s could slow their rapid progress.

The bridge at Kalach crossed the Don River roughly 75 kilometres (47 miles) from Stalingrad, but its garrison only discovered they were under threat on 21 November and remained unaware that XIII Mechanised Corps was within 50 kilometres (30 miles) of their position. The units in and around Kalach consisted of some Luftwaffe anti-aircraft guns, a variety of supply and support troops plus some field police and labourers of the Organisation Todt. Most of the flak pieces were positioned on the higher western bank

overlooking the bridge and the village of Kalach on the eastern bank, where an ad hoc battlegroup was forming.

The Soviet XXVI Tank Corps approaching from the northwest was in a hurry to close the trap and allocated several captured German vehicles to an armoured group that, after three hours of confused fighting, captured the bridge intact and liberated the village. Although the Soviets claimed 1,500 POWs, other accounts noted that German troops managed to drive away and head for Stalingrad, having destroyed supply and repair facilities. The following day troops of the southern pincer, IV Mechanised Corps, arrived at Kalach. Stalingrad was, at least tenuously, surrounded.

As the Germans approached the Don bridges, queues began forming to make the crossing. Priority was given to Germans, and many Romanians were pushed aside with the butt of a feldgendarme's machine pistol. Rumours of Soviet attacks only fuelled the increasing sense of confusion that was slipping inexorably towards chaos. Once across the river there seems to have been little sense of anything but a pervasive desire to reach the haven they believed Stalingrad to be. The question on every man's lips was summed up in one diary entry: "Will we get through to the big pocket?"

Elsewhere other pockets of resistance, such as that of the Romanians commanded by General Mihail Lascar from the remains of V Army Corps, were crumbling under Soviet pressure. Stalingrad, the 'big pocket', seemed

to offer security, order and the chance to survive, whereas the snow-blown steppe was a frozen, featureless wasteland where Soviet cavalry roamed at will scooping up stragglers. The men of the German army in the east, almost to a man, believed the Red Army rarely bothered to keep POWs alive. By 26 November the only organised groups of German troops left on the west bank of the Don were 16th Panzer Division and elements of 44th Infantry division. They crossed the Luchinsky bridge that evening, blowing it after the last man had crossed.

The Soviets now began to develop their inner and outer rings of enclosure as Paulus and his staff struggled to bring some sort of order to Sixth Army. On 23 November, in what Hitler called 'Fortress Stalingrad', Paulus was to carry out his order to "adopt hedgehog [all-round] defence, present Volga line and northern front to be held at all costs [as] supplies coming by air". Furthermore the Fuhrer created a new command, Army Group Don, under the command of Field Marshal Erich von Manstein, on 20 November to restore the situation in southern Russia, despite his other concerns, such as the Anglo-American invasion of North Africa and the occupation of Vichy France.

Within the fluid 200-kilometre (124-mile) perimeter that enclosed Fortress Stalingrad were some 22 divisions, numbering roughly 240,000 men – including much of Romanian 20th Infantry Division, a group of Italians and the entire Croatian 369th Reinforced Infantry Regiment fighting in the factory district. There were also up to 50,000 Russian volunteers working for or fighting alongside the Germans. Known as Hiwis (short for Hilfswilliger or voluntary assistant) they were often POWs collaborating to avoid a dire fate or anti-Soviet groups such as the local Kalmyks and Don Cossacks. These men and women would be a particular target for the NKVD, who were tasked with rooting out all collaborators. Surrounding them were seven Soviet armies that included both the Don and Stalingrad Fronts, along with 21st Army from Southwestern Front and 62nd Army in the city itself.

As the Soviets advanced into the city they were amazed at how many civilians emerged from hiding to greet them. These people were not so lucky. It is likely they were killed by the Germans for their warm clothing

Assault guns move up to their start lines for Operation Winter Storm, which began on 12 December

"STALINGRAD, THE 'BIG POCKET', SEEMED TO OFFER SECURITY, ORDER AND THE CHANCE TO SURVIVE"



Soviet infantry attack the outskirts of a village during Operation Winter Storm. This offensive caused the postponement of Operation Ring

“AS THE SENIOR OFFICERS WERE DRIVEN OFF TO A RELATIVELY CIVILISED CONFINEMENT, THE LOWER RANKS SHUFFLED TOWARDS THE VOLGA RIVER AND A VERITABLE DEATH MARCH TO THE EAST”

The external cordon followed the Chir, Don and Aksay rivers for 322 kilometres (200 miles). Fourth Panzer Army had managed to hold onto a bridgehead across the Chir at Kotelnikovo to the southwest while 16th Motorised Infantry Division covered the empty, inhospitable Kalmyk Steppe between Army Group Don and Army Group A far away to the south in the Caucasus. This latter formation was now in grave danger of isolation – very little covered its lines of communications to the west through Rostov, and it was naked before the Red Army. The obvious question now was what should Sixth Army do? Should it attempt to break out, or stand firm and trust Hitler's promise of an air bridge?

Operation Winter Storm

As the Red Army organised itself around the city, established supply lines and caught its breath, Manstein frantically prepared what was proclaimed to be a relief mission for Sixth Army. However, the matter of a breakout provoked controversy from the moment of encirclement. Manstein was allocated three infantry divisions and three Panzer divisions, only one of which was immediately available. Hitler was only prepared to sanction a thrust to Stalingrad that would enable its resupply and ensure that the city would not fall, but reserved the right to allow a breakout. However, Manstein lacked the resources to accomplish this and re-establish the front to cover Army Group A in the Caucasus. Nor had the Soviets called a halt to their offensive as the continuation of Operation Uranus, Operation Saturn, was timed to start on 10 December.

Saturn was a far more ambitious envelopment offensive that was to break the Italian Eighth Army, which was positioned to the left of Romanian Fourth Army's former position north of Stalingrad, and then push on to Rostov, thus isolating Army Group A. In preparation for the operation, Vasilevsky instructed Don and Stalingrad Fronts to squeeze Sixth Army's perimeter and link up at Gumrak. Fighting began during the first week of December but rapidly ground to a halt in the face of a fierce, well-organised defence, which demonstrated that Moscow had underestimated the power and size of Sixth Army. The Soviets were convinced they had trapped a mere 100,000 men with little combat capability. Consequently, Stalin ordered Rokossovsky to draw up a plan for a more considered offensive against the Stalingrad pocket, which was code-named Operation Ring.

As Manstein's forces gathered at Kotelnikovo bridgehead, Vasilevsky attempted a spoiling attack, which failed but obliged Manstein to alter his line of attack as a consequence. Now it would take a longer route across terrain that involved crossing the Aksay and Myshkova rivers. The attack caused the Soviet forces of the inner perimeter to concentrate on preventing any breakout. It also led to

Operation 'Little' Saturn, which would defeat Manstein's thrust.

Operation Saturn proper was reduced and was now intended to simply break into the rear of Army Group Don via the Italian position. Its start date was to be 16 December. As Manstein's armour reached the Myshkova – the second river it faced – Soviet Sixth and First Guards Armies tore into the Italian positions, which caved in after 48 hours of hard fighting. Simultaneously XXXVIII Panzer Corps's line west of the Don along the Chir River began to crumble. To crown everything, Stalingrad Front counterattacked along the Myshkova River, pushing Army Group Don's armour back to its start line over the course of the next three days. On 28 December a much shaken Hitler agreed to pull Army Group A out of the Caucasus and ordered Manstein to establish a defence line 240 kilometres (150 miles) west of Stalingrad.

Paulus and Sixth Army were on their own. With the Volga frozen, Chuikov's 62nd Army was supplied with relative ease as their enemy slaughtered horses and stared at the skies for the very few aircraft and parachutes that appeared. Christmas celebrations were muted as the morale of Sixth Army gradually eroded, worn down by lack of food and little hope of relief. The Soviets husbanded their resources in preparation for Operation Ring.

Operation Ring

The start date for Ring was 6 January but was delayed by four days. The whole operation was to be carried out by Don Front with holding attacks to be mounted by 62nd and 64th armies. The pocket was to be sliced up with an initial attack to cut off the 'nose' that poked westwards from the city.

The attack began at 9am. 62nd Army's assault groups took the Mamayev Kurgan and the Red October factory, while out on the steppe three Soviet armies hammered the perimeter lines, destroying 44th and 376th infantry and 29th Motorised Divisions, whose troops scattered towards the built up areas to the east. Pausing briefly to regroup, the next phase of Rokossovsky's attack reduced Sixth Army by a further five divisions and forced Paulus to move his HQ into the cellars of the Univermag department store in the city centre.

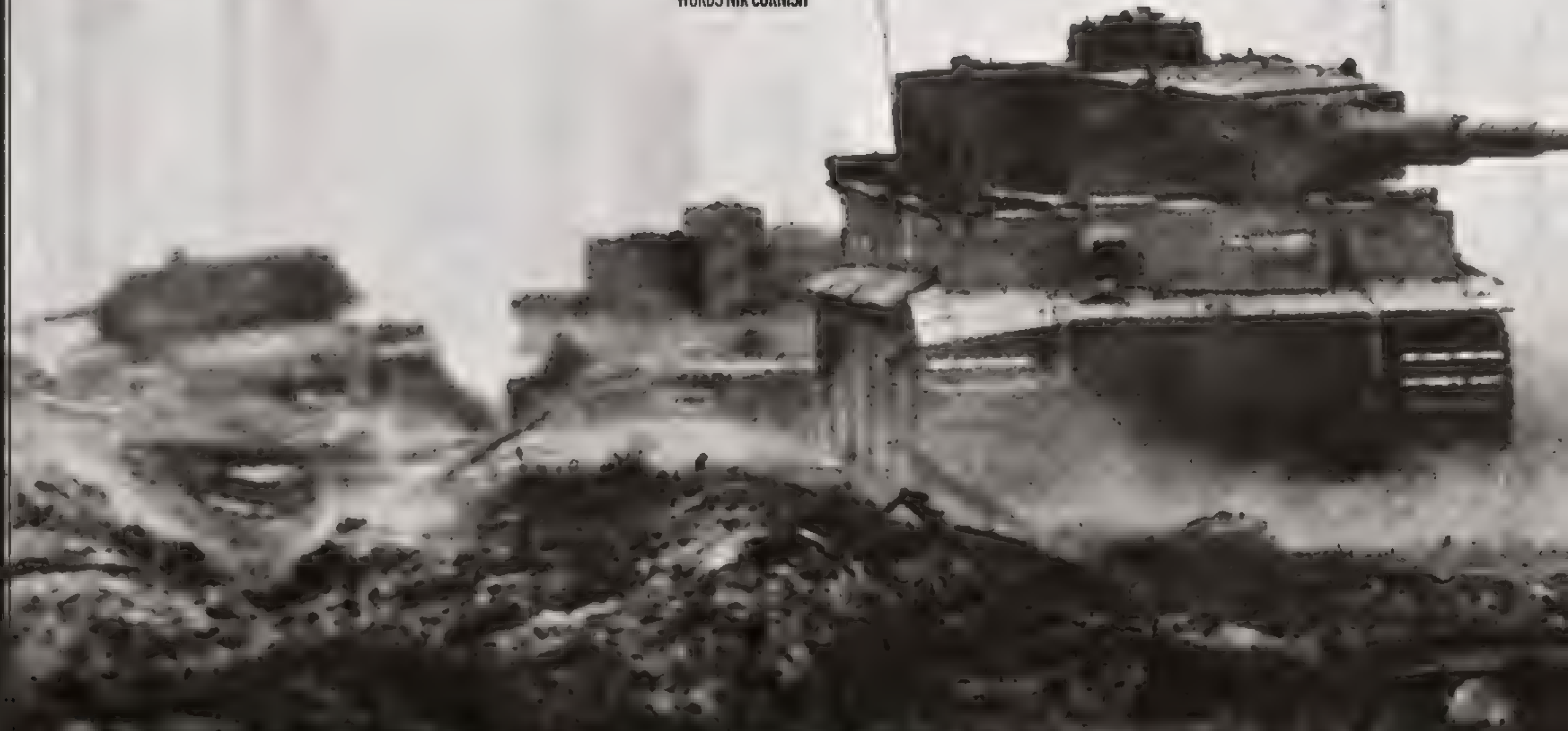
When on 26 January men of Don Front met up with troops of Chuikov's command, the pocket was split into two, north and south. Five days later Paulus was promoted to Field Marshall to stiffen his will to fight on, but to no avail. At 7.45am on 31 January the southern pocket and Paulus announced their intention to surrender. The northern pocket continued to fight on under the leadership of Major General Karl Strecker, who surrendered on 2 February.

As the senior officers were driven off to a relatively civilised confinement, the lower ranks shuffled towards the Volga River and a veritable death march to the east.

TIGER

During the battle of Kursk in July 1943, two of the finest tanks ever created faced one another in a mighty contest that would change the course of the war

WORDS NIK CORNISH



Germany's Operation Citadel aimed to squeeze off the salient around Kursk, but standing before their formidable armoured divisions stood a Soviet defence bristling with its own powerful tanks. The two had met briefly, earlier in the year, during the fighting around Rostov-on-Don and Kharkov, but Kursk was the first occasion in which they fought in significant numbers. In July 1943 Army Group Centre (AGC), faced Central Front, and Army Group South (AGS) prepared to do battle with Voronezh Front and then Steppe Front for the Kursk salient.

Tigers were organised into heavy panzer battalions of three or four companies. Four Tigers formed a zug (platoon) and three or four zugs formed a kompanie (company). Tanks in a zug often moved and worked in pairs.

By the summer of 1943 the various models of T-34/76 were very familiar to the Wehrmacht. The German evaluation of the T-34 during the winter of 1941-42 in effect advised, 'copy it'. The result was the Panther.

The Tiger was less known and understood by the Red Army, but an intact Tiger had been captured near Leningrad in January 1943 and

"WHEN THE GERMANS FIRST ENCOUNTERED THE T-34 THEY WERE HORRIFIED AS THEY HAD VIRTUALLY NO ANTI-TANK GUN CAPABLE OF DESTROYING IT"

thoroughly analysed at the testing ground at Kubinka. Among the conclusions reached was that the T-34 would have to be up-gunned from the 76mm weapon that was its main armament. The result, the T-34/85, was not available in time for Kursk, so the Red Army would be reliant on the T-34/76.

The Soviet armoured fist

When the Germans first encountered the T-34 they were horrified as they had virtually no anti-tank gun capable of destroying it. However, primitive tactics, poor training and maintenance and a lack of logistical support, particularly fuel, cost the Red Army its advantage. Gradually, experience improved all these shortcomings. When the T-34 with an 85mm gun was introduced later in 1943 they once again regained superiority, as it addressed



T-34

Two Tigers work as a pair during the campaign in the Soviet Union. The side guards, above the tracks, appear to have been removed, probably to avoid the wheels clogging with mud or slush



many of the main problems that earlier experience had highlighted.

The T-34 was developed when the need for a medium tank became apparent in the late 1930s. One of the major specifications was ease of mass-production. From the various prototypes the A-32 was chosen, which became known as the T-34. Production began in the spring of 1940 and, when the 76 version was phased out in 1944, roughly 35,500 had been built. Stalin had, in late 1941, vetoed any major alterations to the T-34 in order to simplify and increase production. Nevertheless, modifications were carried out as evacuated factories slowly came back into production during 1942-43, and supplies of items such as radios and optics were soon improved. Consequently, at Kursk the T-34 was a tried and thoroughly tested machine with a wealth of spares that were easy to replace.

Conversely, if one of the Tiger's internal overlapped wheels was damaged, the mechanics had to remove up to eight wheels and undo 45 bolts. Naturally, this was carried out after raising the tank and loosening the track. Of course, all these actions were then performed in reverse. This operation on a T-34 was considerably easier.

"TACTICS, POOR TRAINING AND MAINTENANCE AND A LACK OF LOGISTICAL SUPPORT, PARTICULARLY FUEL, COST THE RED ARMY ITS ADVANTAGE"

T-34s were organised into platoons of three, with three platoons making a company and three or four companies a battalion. A tank brigade, comprising two or three battalions, was usually the smallest formation that carried out independent missions. Crewed by four men (and sometimes women), the task allocation was: driver/mechanic, machine gunner/radio operator (when fitted), loader and commander. With the radio located to the right of the hull machine gun and with the commander in the turret, external communications depended on the radio operator relaying information and orders via the poor quality intercom to the commander. However, the tank commander was also the gunner, and this vital task obviously detracted from his ability to command.

Considerable responsibility was placed on the driver to keep up with the unit, avoid

problematic terrain and generally be aware of the often-chaotic situation around them. The loader simply loaded, which in itself was a physically exhausting task, as the bulk of the tank's 100 rounds of ammunition (each weighing roughly nine kilograms, or 20 pounds) was stored in the floor of the tank. As one T-34 commander, having ordered up a round, recalled, he looked around only to find, "the loader laying, lights out, on the ammo boxes [below him]. He'd been poisoned by the fumes and lost consciousness."

Being overcome by the fumes from when the gun fired was a problem caused by the poor positioning of the fan that was supposed to ventilate the vehicle. Equally problematic for the loader was the lack of room in the turret, as the gun's breech was long, and if the turret were rotated it could easily knock him out or cause other injuries.

The commander's gunnery tasks were also difficult. First he would find his target through the periscope, then use the separate gun sight to aim – two actions that used valuable time.

If the loader were quick, the round went in and the gun was fired. Unfortunately, during training tankers did not get much firing practice at anything other than stationary targets, and consequently gunnery was not an exact science for the crews. Indeed, at Prokhorovka the orders issued to the tankers were simple: drive at the enemy fast, in order to reduce the

range, fire upon approach, and use the terrain to mask the approach. Weighing 28 tons when carrying fuel and ammunition, the T-34 was certainly fast and manoeuvrable. However, it also suffered from abysmal optics and a lack of viewing ports, leading the Germans to describe its crew as 'blind', which, when combined with the commander's combined role as gunner, contributed to a dangerously low awareness of the combat environment.

'Spartan' would be the most complimentary way to describe the T-34's interior from a crewman's point of view. The position of the driver's and machine gunner's seats was awkward and uncomfortable, making the driver's job in particular physically exhausting. When Fifth Guards Tank Army (GTA) drove 400 kilometres (248 miles) to reinforce Voronezh Front, drivers had to be lifted out of their positions by their comrades and massaged back to something near physical normality.

These men and women had driven their tanks at night over the course of three days to retain the element of surprise, as well as helping to avoid Luftwaffe attacks. Mentally the effort must have been shattering. No records are available for the number of vehicles that broke down en route, but clearly the vast majority reached their objective. Given the poor reliability of the Tiger's engines it seems rather unlikely that as many of the German tanks would have made it.

"BEING OVERCOME BY THE FUMES FROM WHEN THE GUN FIRED WAS A PROBLEM CAUSED BY THE POOR POSITIONING OF THE FAN THAT WAS SUPPOSED TO VENTILATE THE VEHICLE"

Tigers on a runway in 1944. The Zimmerit paste, used to prevent magnetic mines from attaching, can clearly be seen on the tanks

A line of T-34s advance on Prokhorovka during the Battle of Kursk



T-34s were often used to help move soldiers forward rapidly over rough or exposed terrain





T-34 TECH SPEC

ARMAMENT

From February 1941 the main gun was the F-34 76.2mm, capable of firing armour piercing, HE and shrapnel rounds. There were two 7.62mm machine guns, one hull-mounted and one mounted co-axially with the main weapon. In earlier models 77 shells were carried, nine of which were stored in the turret itself and the remainder in containers that formed the deck beneath the turret. Of these 21 were AP. When the hexagonal turret was introduced the number of shells increased to 100, with 14 placed in the turret. The kill range when faced by a Tiger's thick frontal armour was under 500m (547yd).

ENGINE

All models mounted the V2 diesel engine with a top speed of 47kph (29mph) on the road, and 36kph (22mph) off-road.

FUEL CAPACITY

Internally, 610l (135gal) was in eight fuel tanks built into the hull of the vehicle. From the 1943 model onwards up to three external fuel cylinders were attached to the outside of the hull to the rear, which carried a further 270l (59gal). Prior to that, two external fuel boxes were attached to the hull at the rear of the engine compartment. Range on the road was 380km (236mi), and off-road 260km (161mi).

ARMOUR

FRONT PLATE 45mm sloped at 60°

TURRET 45mm (1.77in) sloped at 30°

GUN MOUNTING 85mm (3.35in)

SIDES 40mm (1.57in) sloped at 40°

REAR PLATE 40mm (1.57in) sloped at 48°

FLOOR 16mm (0.6in) under the crew, 14mm (0.55in) under the engine

"THE T-34 WAS CERTAINLY FAST AND MANOEUVRABLE. HOWEVER, IT ALSO SUFFERED FROM ABYSMAL OPTICS AND A LACK OF VIEWING PORTS, LEADING THE GERMANS TO DESCRIBE ITS CREW AS 'BLIND'"



*Men and machines lie
wrecked in the scarred
battleground of Kursk*



“INTERNALLY THE TIGER WAS CONSIDERABLY MORE SPACIOUS. IT WAS ALSO PAINTED, WHICH SPARED THE CREW THE DANGER OF INJURY FROM FLYING METAL SHARDS WHEN A SHELL HIT THE MACHINE”



GERMANY'S BIG CAT

The Tiger was conceived as a heavy tank of the type known as 'breakthrough tanks'. However, development was slow and, having gone through a series of prototypes, two competitors for the contract were identified – one produced by Porsche, the other by Henschel. The Henschel Tiger went into production in August 1942 and production ended two years later after 1,350 had been built.

One major derivative, the Tiger II, was developed from original, and the others were largely irrelevant. The Tiger certainly fulfilled the 'heavy' part of the brief, weighing in at some 56 tons fully loaded. This meant that to cross water obstacles it would require a 60-ton-capacity bridge, which were few and far between. Despite the first 495 Tigers having a built-in snorkel, climbing out of the water onto a progressively more saturated bank negated this accessory.

The simple question of how to move a damaged machine of this weight seems to have been overlooked. It required at least two heavy-duty prime movers to haul one Tiger out of a ditch or simply into a position where the repair crews could get to work. Furthermore, German eagerness to get the Tiger into action had prevented the accumulation, not to mention the distribution, of spare parts.

Consequently, when the dense Soviet minefields began to take their toll, basic items such as track pins were unavailable to the maintenance companies. This resulted in the cannibalisation of other damaged Tigers to keep at least some in action. This problem was brought into sharp relief when on the first day of Operation Citadel, 5 July, 13 out of 14 tanks of the 1st SS Panzer Division were destroyed.

Indeed, such were the repair problems faced by AGN's Tiger Battalion that by 6 July, just the second day of fighting, half of its Tigers were out of commission and a request was sent to the factory in central Germany for 10 transmissions and engines, as well as more basic parts. These were eventually flown in and, on 9 July, the battalion withdrew for repairs.

However, the Tiger was well provided with radio and intercom equipment both for external and internal communications, as well as excellent optics and a good number of vision ports, so an alert commander would have a better awareness of events around him than his Red Army counterpart. Responsibilities for the five-man crew was broken down as commander, gunner, loader, driver and radio operator/hull machine gunner. This is clearly a more sensible arrangement than in the T-34, where the

"THE TIGER CERTAINLY FULFILLED THE 'HEAVY' PART OF THE BRIEF, WEIGHING IN AT SOME 56 TONS FULLY LOADED"

by Tom Swales, author of *The Tiger in the East*, published by Osprey, £12.95



Tiger was considerably more so.
It was also painted white
crew the danger of injury from fly-
shards when a shell hit
unlike the T 34, the insides were
bare metal. In the event,
disabled or killed the machine
was
the
over
1943
the
1943 onwards
magnetic mines

TIGER TECH SPEC



ARMAMENT

An 8.8cm KwK 36 gun, two 7.92mm machine guns, one co-axial, the other hull-mounted, to the right of the driver. 92 rounds of high explosive and armour piercing shells were carried. Effective range: at 2,000m (2,187yd) there was a 50 per cent probability of a kill when striking the 45mm sloped frontal armour of the T-34. This increased if the side or rear plates were hit. The commander of the Liebstandarte Tiger Company noted the ideal range for a good Tiger gunner was 800m (875yd) giving a 100 per cent chance of a kill.

ENGINE

The Tiger was powered by a Maybach petrol engine that produced a maximum road speed

of 44kph (27mph) with that performance halved when the tanks was off-road.

FUEL CAPACITY

568l (125gal) internally stowed next to the engine compartment. Range on the road was 117km (73mi), and off-road 68km (42mi).

ARMOUR

FRONT PLATE 100mm (3.9in) sloped at 80°
TURRET 82mm (3.2in)
GUN MOUNTING 110mm (4.3in)
SIDES 80mm sloped at 90°
REAR PLATE 82mm sloped at 82°
FLOOR 26mm (1in)



KILLS & LOSSES

The debate and research concerning this topic continues to exercise the minds of historians. No single source can really claim to be definitive as both sides had their own reasons for overstating their 'kill' count. The Soviets inflated their numbers, particularly of Tigers, to justify their own severe losses. The Germans did so for the simple reason that they lost. Equally problematic is the definition of a 'kill': does it mean a track blown off, the turret blown off, or the vehicle sinking into the mud up to the track tops and being abandoned? Furthermore, some Russian researchers in the post-Soviet world have reflected their anti-Communist stance to inflate Red Army losses. Here is not the place to enter this complex discussion.

There was something in the region of 95 Tigers operable with AGS on 4 July, and by 15 July, when

"STALIN, NOT GENERALLY FUSSED OVER CASUALTIES, ALMOST PUT GENERAL ROTMISTROV (COMMANDER OF FIFTH GTA) ON TRIAL FOR HIS COMMAND'S LOSSES AT PROKHOROVKA"

In part the confusion and controversy concerning losses can be understood in this images of wrecked Panzer IVs. With the turret encircled with an armoured screen it would appear to be a Tiger I. It is not surprising that Soviet tankers, keen to impress in the heat of battle, would lodge a claim for a Tiger kill when it was a Panzer IV

AGS halted and the last blow of Operation Citadel had been struck, there were 63 available. However, the Soviets did not consider the fighting in the Kursk Bulge (as the Russians call it) on the southern face over until 23 July and so continued to count kills.

AGC's Tiger losses, from the 31 tanks committed on 5 July, are awkward to assess as the records of Ninth Army are difficult to access. However, on 10 July there were 26 still operational. By 12 July AGC had shot its bolt and the Soviets had unleashed Operation Kutuzov that aimed to destroy AGC. Judging by those figures, 37 Tigers were irretrievably lost by both AGS and AGC.

Keeping score for the T-34 was less problematic as it was a familiar and easily identified vehicle. The three fronts involved, including armour from Steppe Front, committed 2,730, of which 854 were lost by Voronezh and Steppe Fronts, but only 175 by Central Front. This simply reflects the different commitment levels of armour on the northern and southern faces of the salient. It must also be remembered that at the end of operations the Red Army was in a position to pick over the remains of its tanks and restore what was worth saving, whereas the Germans were not. Soviet tank crews were paid a bonus of 1,000 roubles for every confirmed kill. Interestingly Stalin, not generally fussed over casualties, almost put General Rotmistrov, commander of Fifth GTA, on trial for his command's losses at Prokhorovka.

ON THE BATTLEFIELD

ARMY GROUP NORTH

Most accounts of Operation Citadel focus on the movements of AGS due to the battle of Prokhorovka. Consequently, the rather less well-known activities of AGN are often overlooked, as is the deployment of the 31 Tigers of Heavy Panzer Battalion 505. However, 505 was only joined by its third company on 8 July, hence its lower numbers.

ARMY GROUP SOUTH

Each of the three SS Panzer Grenadier divisions of II SS Panzer Corps – Liebstandarte, Das Reich and Totenkopf – had an integral Tiger company. Additionally, the Grossdeutschland Panzer Grenadier Division had its own 15-machine Tiger company. Heavy Panzer Battalion 503 was a part of III Panzer Corps under Army Detachment Kempf: it was split up, with one company each going to 6th, 11th and 19th Panzer divisions.

THE T-34

The deployment of the T-34 was universal. Other than some specialist heavy tank formations almost every Soviet armoured formation included them.

The major units were the three tank armies that were engaged in the defensive phase of the Kursk fighting. First Tank Army was part of Voronezh Front, Second Tank Army subordinated to Central Front and Fifth GTA was held in reserve as part of Steppe Front. In addition, separate tank formations were allocated to the various armies of both Central and Voronezh Fronts. The bulk of these units were formed of T-34s. Voronezh Front counted 946, of which First Tank Army held 477, V Guards Tank Corps 127, Seventh Guards Army 114. These were supported by a further 584 in Fifth GTA, II and X Tank Corps.

Central Front deployed roughly 1,200 T-34s, split between Second Tank Army, IX and XIX Tank corps.

"TANK CREWS WERE PAID A BONUS OF 1,000 ROUBLES FOR EVERY CONFIRMED KILL"



Pavel Rotmistrov's Fifth Guards Army suffered such high losses that Stalin considered arresting him



ARMY GROUP CENTRE

DEPLOYMENT MAP KEY

GERMAN UNITS

1. 503rd Heavy Tank Battalion
2. Panzer Grenadier Division Grossdeutschland
3. SS Panzer Grenadier Division Liebstandarte
4. SS Panzer Grenadier Division Das Reich
5. SS Panzer Grenadier Division Totenkopf
6. 6th Panzer Division
7. 19th Panzer Division
8. 7th Panzer Division

SOVIET UNITS

1. 251st Tank Regiment
2. 259th Tank Regiment
3. 240th Tank Regiment
4. Second Tank Army
5. 237th Tank Regiment
6. 129th Tank Brigade
7. 27th Guards Tank Regiment
8. V Guards Tank Corps
9. VI Tank Corps
10. XXXI Tank Corps
11. First Tank Army
12. III Motorised Corps
13. 96th Tank Brigade
14. II Guards Tank Corps
15. Fifth Guards Tank Army



Above: T-34s move forward at Kursk, closely accompanied by infantry, who had hitched a ride on the tanks

FRONT LINE

● BRYANSK

BRYANSK FRONT

● OREL

FRONT BOUNDARY

● PONYRI

CENTRAL FRONT

● KURSK

FRONT & ARMY GROUP BOUNDARY

● PROKHOROVKA

VORONEZH FRONT

● SUMY

STEPPE FRONT

● BELGOROD

FRONT BOUNDARY

ARMY GROUP SOUTH

● KHARKOV

SOUTH WESTERN FRONT

FRONT LINE



Two T-34s were used by Sixth Panzer Division to deceive the defenders of a vital bridge south of Prokhorovka into not firing – the deception succeeded, allowing the Tigers to cross

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Two T-34s were used by Sixth Panzer Division to deceive the defenders of a vital bridge south of Prokhorovka into not firing – the deception succeeded, allowing the Tigers to cross

“TWO T-34S WERE USED BY SIXTH PANZER DIVISION TO DECEIVE THE DEFENDERS OF A VITAL BRIDGE SOUTH OF PROKHOROVKA INTO NOT FIRING – THE DECEPTION SUCCEEDED, ALLOWING THE TIGERS TO CROSS”



In late 1941 and early 1942 add-on hull armour plates were added to T-34s as a response to improving German anti-tank guns. The plates were between 20-35mm (0.78-1.34in) thick and were non-uniform in shape. They were dropped in February 1942, possibly due to a shortage of spare armour plate.



The camouflage colours of yellow, brown and green were introduced on 18 February 1943. Prior to that date dark grey was the standard factory finish. Skid armour to protect the tracks was not added to the Tiger to avoid it clogging with mud and to keep the weight down. The Tiger was the first German tank with wide tracks, which improved its ability to cope with mud and snow.

TOP TANK?

The T-34 was a medium tank, the Tiger a heavy tank, therefore direct comparisons are absurd. The Tiger was well-engineered in a long-established factory, the T-34 was mass produced in often relocated, under-manned factories where numbers mattered more than quality or refinement. However, the T-34 series did lead to the up-gunned 85 version and the chassis was successfully used for the SU 85 and SU 100 tank destroyer versions, which were rather more flexible than the Tiger II (King Tiger) or the Jagdtiger. Furthermore, 20 T-34s served at Kursk with SS Panzer Grenadier Division Das Reich, which is testament to the esteem in which they were held. Two T-34s were used by 6th Panzer Division to deceive the defenders of a vital bridge south of Prokhorovka into not firing – the deception succeeded, allowing the Tigers to cross. To counter this threat a substantial force was moved off from the main fighting to contain this bridgehead. According to Soviet records, some Tigers were taken into service with the Red Army during late 1943-44 but proved too difficult to maintain and were abandoned when they wore out. In the final analysis, the Red Army was victorious at Kursk and the T-34 was the tank that made it possible. As someone (Stalin by most accounts) said, "Quantity has a quality of its own." General Heinz Guderian, who witnessed a T-34 attack at Kursk on 10 July, compared it to, "rats streaming across the landscape". Bad luck for the cat.



In action, the Tigers of 505 Heavy Panzer Battalion move out with their accompanying Panzer IIIs. The attack formation would have the Tigers heading a panzerkern (armoured wedge), to act as the breakthrough element of an attack that would be exploited by Panzer IIIs and IIs. This ideal formation was rarely employed during Operation Citadel. Other heavy Panzer battalions had begun to lose their Panzer IIIs, and the Tiger units were to proceed without ancillary tanks.

WARSAW RISES

WORDS MARIANNA BUKOWSKI

Below: Four and a half hours of film recorded during the Warsaw Uprising has survived, giving a unique insight into the lives of soldiers and civilians in the fight for the city.

Home Army soldiers, using a pistol and a Blyskawica sub-machine gun, fight the German forces on the streets of Warsaw



At 5pm on 1 August 1944, Europe's largest underground resistance, The Polish Home Army, rose up against the Germans. Men, women and children fought to liberate Warsaw

In Poland the subject of the Warsaw Uprising of 1944 is seen from many different perspectives and, like all battles, has its own specific circumstances: military, political, social and – seen from Poland's history of uprisings – cultural. Yet, while no longer suppressed, as it was in the years of communism and Cold War, it still remains a battle relatively unknown outside of Poland today.

Fought from 1 August–2 October 1944, the outcome of the 63-day battle is a tragedy. An estimated 18,000 Polish insurgents lost their lives and between 180,000–200,000 civilians died during the uprising. Warsaw became a city of ruins. However, despite the catastrophic end, it is also a story of tragic beauty, heroism and fierce resistance against the odds.

A history of uprisings

With the German and Soviet invasion of Poland in September 1939, Polish resistance to the occupiers was instant. Poland had only relatively recently regained its independence at the end of World War I, following 123 years of Russian, Prussian and Austrian partitions, and building underground secret networks against an enemy occupier was something of a second nature. Generations of Poles had fought for independence – in the Kosciuszko Rising in 1794, with Napoleon for the Duchy of Warsaw from 1807–1815, the November Uprising of 1830, the January Uprising of 1863 and in Piłsudski's Legions in WWI, all fighting for the rebirth of the Polish state.

By 1940 Poland's armed resistance movement had formed as the Związek Walki Zbrojnej (Union of Armed Struggle) and developed into the Armia Krajowa (AK or Home Army) in 1942 – the biggest underground army in occupied Europe. By 1944 an estimated 400,000 soldiers carried out military training, diversionary activities, sabotage operations and intelligence gathering in preparation for an armed national insurgency.

Occupation

The occupation in Warsaw, Poland's capital city, with around 1.3 million inhabitants in 1939, was particularly brutal from the very start. Germans confiscated property, renamed streets and put up "Nur für Deutsche" (only for Germans) signs across the city. Every citizen was forced to carry their 'kennkarte' ID card, work and residence permits to show any German official on patrol at any given time.

The German authorities imposed strict food rationing. The average adult in Warsaw lost ten kilograms in weight during the occupation. Monetary depreciation meant loss of any pre-war savings and disproportionately low wages, creating an extortionate black market. Mass arrests and executions of civil servants, doctors, teachers, lawyers, scientists and artists increased and continued throughout the occupation, such as the massacres at Wawer, 1939, Palmiry, 1939/1940, Kabacki Forest, 1939/1940, and Sekocinski Forest in 1942.

From October 1941, under the penalty of death, Jews were no longer allowed to leave the Warsaw Ghetto. Helping or hiding Jews was also punishable by death, not only for the one responsible, but also for their entire family. Despite this, many still offered any assistance they could. In 1942 Jan Karski delivered an

impassioned plea on behalf of Poland's Jews to Allied officials in London and to American President Franklin D Roosevelt. In 1943 the remaining Jewish population revolted in the heroic but sadly doomed Ghetto Uprising.

In the autumn of 1943 SS-Brigadeführer Franz Kutschera, head of the SS and police in Warsaw, introduced public street executions. The police were allowed to kill anyone at will, on the spot. Round-ups, mass executions and forced deportations as slave labour to Germany became so frequent that when someone left their house, they would not know if they would ever come back.

It is impossible for anyone that has not lived through it to understand what it really means to live in constant fear of arrest, torture and death. This terror created a strong unity against the Germans, and sometimes with total strangers, when a glance, a word or some small gesture from someone that just happened to pass on the street could save a stranger's life.

Class of 1920

Many of the young soldiers that would come to fight in the uprising of 1944 were born in the 1920s, and are known in Poland as the 'Class of 1920'. Born free in the Second Polish Republic, they felt a strong sense of patriotic duty and civic engagement, and as they came of age during the brutality of the occupation, they felt it was their responsibility to fight for Poland's freedom.

As German authorities closed all secondary schools and universities, forbidding Polish history, geography and literature to be taught, teachers took up the struggle against the occupier by providing clandestine study groups. It is estimated that 90,000 students attended these secret schools held in private homes, taught by about 5,500 teachers in 1943-1944.

From a young age many joined the 'Grey Ranks' and were very active in the scout

movement, learning first-aid skills and military drills. Teenagers spent their free time on conspiratorial activities and small-scale sabotage. Painting the anchor symbol of 'Poland Fighting' on a wall of a house or busy street was very dangerous but boosted morale immensely in the fight against the occupiers.

The iconic PW anchor symbol for "Polska Walczaca" (Poland Fighting) was designed by Anna Smolenska, a scout and art history student who would perish in Auschwitz in 1943.

Commanded by Brigadier General Emil August Fieldorf 'Nil' (Nile), the Home Army's Directorate of Diversionary Operations, the KEDYW, consisted of elite units and undertook all manner of diversionary and sabotage activities, such as train derailment, arson, blowing up bridges, planting bombs in SS barracks, sabotage work at German factories and freeing prisoners held by the Gestapo.

One of the KEDYW's special units, named 'Agat' (Anti-Gestapo), and later 'Pegaz' and 'Parasol', carried out the assassinations of exceptionally brutal Nazi officials. The first successful liquidation was of the sadistic deputy commandant of Pawiak prison, SS-Oberscharführer Franz Bürkl, in September 1943. The Sten gun used to kill Bürkl was carried to the location in a specially constructed violin case. One of the assassins, Bronisław Pietraszkiewicz, pseudonym 'Lot' (Flight), was to become the leader of Operation Kutschera, assassinating SS-Brigadeführer Franz Kutschera in February 1944. Similar to the better known killing of Reinhard Heydrich in Prague, Kutschera died on location. Just as the mass reprisal killings in Lidice had followed Heydrich's death, 300 people were shot in Warsaw by the

"AS THEY CAME OF AGE DURING THE BRUTALITY OF THE OCCUPATION, THEY FELT IT WAS THEIR RESPONSIBILITY TO FIGHT FOR POLAND'S FREEDOM"



Portrait of a Soldier / FilMOTEKA Narodowa



17-year-old Wanda Traczyk-Stawska, firing her Błyskawica gun during the uprising

Above: Structure of the Polish underground state and its relationship to the government-in-exile based in London

Underground printing presses published newspapers and leaflets, providing vital information, and helped to keep up morale. Over 700 press titles were published during the occupation. As German authorities closed all secondary schools and universities, teachers took up the struggle against the occupiers by providing clandestine study groups. Many teenagers were also active in the scout movement, learning skills that would prove vital for a chance of survival before the war's end.

"BY 1944 AN ESTIMATED 400,000 SOLDIERS CARRIED OUT MILITARY TRAINING, DIVERSIONARY ACTIVITIES, SABOTAGE OPERATIONS AND INTELLIGENCE GATHERING IN PREPARATION FOR AN ARMED NATIONAL INSURGENCY"



Wladyslaw Sikorski
was prime minister of
the Polish government
in-exile, until his death
in 1943

Germans in reprisal for the Poles' assassination of Kutschera.

Escaping after the action, one of the cars used by the assassins ran into a German checkpoint at the Vistula bridge, and two of the assassins jumped over the balustrade into the freezing Vistula River. 'Lot' escaped in a second car, but having been wounded during the action, he died later, after surgery, from his wounds. He was only 22 years old.

W-hour

By June 1944 the Russian offensive in Poland had started, this time on the side of the Allies. The Germans were in retreat and had begun to evacuate Warsaw. Reports were coming in that the Red Army was approaching the Vistula from the eastern suburbs of Warsaw. While diplomatic relations between Poland and the Soviets had not been re-established since the Katyn massacre, Home Army Commander General 'Bor' Komorowski was convinced the Soviet attack was continuing towards Germany.

After consulting with the government delegate Jan 'Sobol' Jankowski, he decided to start the uprising to liberate the capital, therefore safeguarding the sovereignty of the Polish state before the Red Army entered. In the words of Jankowski, "We wanted to be free and owe our freedom to nobody."

'W-hour' was set for 5.00pm on Tuesday 1 August 1944. The uprising was expected to last three days, or a week at most. Victory was all but certain. Most Varsovians welcomed the Warsaw Uprising with enthusiasm – for the first time in five years of occupation they had a chance to be free. "We were ready to give absolutely everything for freedom," said Wanda Traczyk-Stawska, a 17-year-old girl scout.

Many of the scout groups and units that had formed during the occupation became some of the most famous formations of the rising: Battalion Zoska, Parasol, Koszta, Odwet. With many soldiers being so young, between 16-24 years old, the bonds they forged would last for life. Many would choose heroic-sounding or mythological noms de guerre, but some would be nicknamed by their friends. The boys in Traczyk-Stawska's unit named her "Paczek", meaning rosebud or doughnut. Another characteristic of the uprising was that boys and girls would fight together, side by side.

Traczyk-Stawska would become one of the women who took up arms against the enemy and fought as a soldier in a unit under the direct disposition of General Antoni Chrusciel, whose nom de guerre was 'Monter' and was in command of all the fighting forces in Warsaw.

According to Bór-Komorowski, the Home Army strength amounted to nearly 40,000

underground soldiers in Warsaw. Today it's estimated that on 1 August, 25,000 soldiers took up the struggle and, as more joined in, the number would rise to nearly 50,000. However, only around 10 per cent of them had guns. Every imaginable weapon that could be found was used. One of the most recognised guns of the rising is the 9mm sub-machine gun 'Blyskawica', meaning 'lightning', that was designed by Polish engineers and assembled in underground workshops. Much would depend on taking weapons off the enemy and on the supply of ammunition, of which there was a great shortage from the start. In comparison, at the time of the outbreak of the rising, the German garrison in Warsaw had almost 20,000 well-armed and highly trained soldiers, yet at first the Germans sustained heavy losses.

Soldiers of the resistance

A Home Army soldier's uniform was a red and white armband. Although the uprising started in the summer heat of August, those who were able to prepare, dressed in what suitably durable clothing they had. Many soldiers wore a mixture of civilian and any military clothing that they could find, making each soldier's uniform rather individual and unique. But as the battle went on civilian clothing tore and wore out fast.

When the Home Army secured larger areas they also took over German warehouses and storage facilities, and so large quantities of German uniforms came into their possession, which they would use. Any soldier will attest to the importance of wearing boots and a helmet, as well as clothes with pockets and belts in battle. German belts with an eagle swastika on the buckle were worn upside down. Photographs of young smiling nurses and couriers wearing Waffen-SS camouflage anoraks over summer dresses and sandals create a striking contrast.

Ask any veteran soldier, and they will likely say that the bravest in battle were the nurses and first-aid girls. They would run straight into the raging battlefield with stretchers, and under fire from Germans they would try to save the lives not only of Polish soldiers but also of severely wounded Germans.

Couriers and liaison girls were vital in coordinating information between different units, which was exceptionally dangerous, as it meant having to run through enemy territory to do so. Unarmed due to the lack of weapons, they had no guns to protect themselves – when captured, they would often be raped before they were executed.

Adam Borkiewicz was the first historian of the uprising. In the opening lines of his book are the now legendary last words of courier Maria



**"ONE OF THE MOST
RECOGNISED GUNS OF THE
RISING IS THE 9MM SUB-
MACHINE GUN 'BŁYSKAWICA',
MEANING 'LIGHTNING', THAT
WAS DESIGNED BY POLISH
ENGINEERS AND ASSEMBLED IN
UNDERGROUND WORKSHOPS"**



Left: The 'Lightning' 9mm sub-machine gun is one of the most famous weapons of the uprising. It was designed by Polish engineers and manufactured in underground workshops

Home Army soldiers relied on captured weapons, vehicles and ammunition. Here, they can be seen in a captured Sd.Kfz 251 vehicle



Members of the
Zoske battalion.
The armband
marking the Home
Army fighters can
clearly be seen



**"THE GERMANS KILLED HOME ARMY
SOLDIERS AS 'BANDITS AND TERRORISTS',
AND CONSISTENTLY BROKE THE RULES
OF WAR WITH THE CONTINUOUS MASS
MURDER OF CIVILIANS"**



The Home Army was at a serious disadvantage in terms of weapons and supplies, and used whatever they could find during the uprising. But they showed great determination to free themselves after years of German occupation.



“ON HIMMLER’S ORDER ALL COMBATANTS AND NON-COMBATANTS, INCLUDING WOMEN AND CHILDREN, WERE TO BE SHOT AND WARSAW WAS TO BE RAZED TO THE GROUND”





Prudential was the second-tallest European skyscraper upon its construction in 1931 and was the first building for television broadcasts in Europe. The Prudential was hit by the Karl-Gerät "Thor" on 28 August 1944.



Comer, who upon capture was asked, "Bist du Banditin?" (are you a bandit?), to which she replied, "I am a soldier of the Home Army", before she was executed on the spot.

Recognised by the Allies as a combat force, the Home Army was protected under the Geneva Convention. Yet the Germans killed Home Army soldiers as "bandits and terrorists", and consistently broke the rules of war with the continuous mass murder of civilians.

Civilian frontline

As news of the Warsaw Uprising reached Himmler, he appointed the command in Warsaw to Erich von dem Bach-Zelewski, chief of German anti-partisan formations. On Himmler's order all combatants and non-combatants, including women and children, were to be shot and Warsaw was to be razed to the ground.

Under the command of SS Gruppenführer Reinefarth, the notorious RONA brigades of Kaminski and Dirlewanger started the assault on the Warsaw neighbourhoods of Ochota and Wola on 5 August. When they advanced, they would use women and children as 'human shields' in front of their tanks. As mass rape and systematic murder of civilians continued, during the course of a few days over 40,000 civilians were slaughtered.

The mass killings in Ochota and Wola count among the worst atrocities of the war. This only reinforced the Home Army soldiers' belief that now the rising had started, there was no turning back – it was a battle to the end. Every street, every house was fought for.

The Germans used heavy rocket launchers, which civilians nicknamed 'cows' due to the moaning sound they made when the missiles were launched. People caught in their range as they exploded became 'living torches' coated in flammable liquid. Another terrifying German weapon was the so-called 'Goliath', a small remote-controlled tank filled with explosives.

Many civilians lived in basements throughout the uprising and only went out on street level when absolutely necessary, moving through underground passages and basement tunnels created by demolishing the walls between cellars. The longer the rising went on, the harder their situation became.

At times, in certain areas, the relationship between the civilian population and Home Army soldiers became understandably strained. Nevertheless, they held out. The truth is that without the support of the civilian population the uprising could not have continued. It was the civilians that helped to set up and worked in hospitals treating the wounded, built barricades, cooked food and collected water, they put out fires and provided shelter for soldiers. It was with their help that the battle could continue.

Battlefield Warsaw

The insurgents adopted defensive tactics and achieved significant success in the city centre, capturing the PAST state telephone company building, the Holy Cross Church and the police headquarters. They also mounted offensive actions in the Żoliborz area, attempted assaults on the railway station and tried to establish a link between the city centre and the old town area. Unfortunately, these attempts

proved unsuccessful and became some of the bloodiest battles of the uprising.

The insurgents ultimately failed to capture the most essential military targets and were locked in an uneven battle against continuous German reinforcements of heavy weapons, systematically destroying buildings and Polish positions with artillery fire supported by air raids.

The Germans systematically killed civilians following any retreat by the Home Army. Knowing that civilians would be murdered once the Home Army had been forced to abandon its positions was the absolute worst times of the uprising, said Traczyk-Stawska: "A soldier, when he is firing, when he is in battle, he does not feel pain even when he is wounded," she said. "Pain comes later, and even when a soldier is dying, then that death is a very different situation – compared to civilians, who suffer much worse deaths than soldiers. A soldier has a different mindset. He is armed. He is fighting. He is in a state of euphoria and the adrenaline is very high. But civilians... they were dragged out and executed... defenceless." The suffering of civilians is something that Wanda Traczyk-Stawska thinks about constantly, to this day.

Home Army soldiers were a motley crew. One soldier in Traczyk-Stawska's unit, 'Kruczek', forever the avid reader, would crawl along a torn barricade on his back, his jacket bulging up, filled with books that he had found along the way in some bombed out, abandoned buildings. Another soldier in their unit was unwilling to be separated from his wife and child, and brought them along with him – crawling through the torn barricade, the wife would carry their wrapped up newborn baby in her mouth, like a lioness. Scenes like this would seem improbable in a film, and yet in real life they happened. The Warsaw Uprising was filled with many surreal or miracle-like experiences.

The fall

After fierce fighting, the German units captured the last defences of the old town on 2 September. With the fall of the old town, no single building was left standing, and the conditions of the insurgents worsened with each day. The catastrophe forced Colonel Karol Ziemski to begin an evacuation. Every attempt to break through the German lines and connect with the city centre had failed, and the only way out of the siege was through the sewer tunnels. The municipal sewer system ran under most of the city and had been used by couriers throughout the uprising. The conditions in the sewers were very difficult: insurgents waded in darkness through toxic waste, with the risk of Germans hearing them from above and releasing poison gas or explosives into the tunnels. It took

"THE CONDITIONS IN THE SEWERS WERE VERY DIFFICULT: INSURGENTS WADED IN DARKNESS THROUGH TOXIC WASTE, WITH THE RISK OF GERMANS HEARING THEM"

around four hours to traverse just two kilometres that way.

For two days, over 5,000 insurgents escaped through the sewers. On 2 September the last Home Army units left the old town. Behind them they left some 40,000-50,000 civilians. The old, sick and wounded were shot by the Germans, and the rest were transported to Mauthausen and Sachsenhausen.

This is one of the most tragic chapters of the uprising. The fall of the old town also prevented the city centre insurgents from connecting with units in Żoliborz and Kampinos Forest, and allowed German forces to concentrate on suppressing each individual stronghold of resistance. Despite the insurgents' great determination, the Germans had an overwhelming advantage, both in manpower and military resources. The Karl-Gerät 040 siege gun caused huge devastation, along with shelling by German artillery and the Luftwaffe, which made nearly 1,400 sorties over Warsaw, fighting the insurgents and destroying the city.

In the end, all the insurgents could do was to hold onto their positions. With time the conflict reached a virtual stalemate. Despite the brave efforts of Allied airmen, the Warsaw Airlift had not been successful. The route from Italy was too difficult, and by the time some airdrops were conducted most supplies fell into enemy hands. Churchill couldn't persuade Stalin to give Allied flights landing rights in the USSR to help get supplies and ammunition to the insurgents in time. Western assistance had failed. The conditions for civilians became unbearable and the Home Army had no resources left with which to fight. The situation was unsustainable. It is still remarkable that the rising lasted for as long as it did – 63 days.

Capitulation

The last shot of the uprising was fired on 2 October. In the final capitulation terms, agreed between representatives of the Home Army command and Van dem Bach, Home Army soldiers were to be treated as POWs according to the Geneva Convention. Civilians were not to be killed or persecuted.

Around 11,600 Home Army soldiers surrendered, along with about 2,000 women. Wanda Traczyk-Stawska was one of the 1,800 women that would end up as a POW in Stalag VI-C Oberlangen, where in a beautiful twist of fate, they would later be liberated by the Polish First Armoured Division led by General Maczek.

Elsewhere, many Home Army soldiers would be freed or escape German captivity and continue to fight before the war's end.

The mass evacuation of the civilian population from Warsaw, which the Germans insisted upon, is an unprecedented event in Europe's history and remains one of the most tragic and haunting scenes of the war. First taken to a transit camp, in contradiction to the capitulation agreement, over 100,000 Varsovians were sent as slave labour to Germany, and tens of thousands were sent to concentration camps, including Mauthausen, Ravensbrück and Auschwitz. The exact number of people who perished in the uprising will remain unknown.

An estimated 18,000 Polish insurgents lost their lives, while German deaths are estimated

to be similar. It was the civilians that suffered the most incomprehensible loss: Between 180,000-200,000 civilians died during the 63 days of battle. At the Warsaw Insurgents Cemetery in Wola, over 100,000 people are buried, most in mass graves.

The landscape after battle

For the three months that followed, the demolition of Warsaw was done methodically, house by house, on Hitler's orders. Around 85-90 per cent of Warsaw was destroyed.

As the Red Army finally entered Warsaw in January 1945 they 'liberated' a pile of rubble. In their wake, the NKVD arriving from the east had been disarming and arresting Polish insurgents all along. Many of the labour and concentration camps established under German occupation retained similar functions under the new Soviet occupiers. Poland's borders were changed and fell under the Soviet sphere of influence. The legitimate Polish Government-in-Exile in London didn't return to Poland, where Stalin had a Soviet-friendly government installed.

The geopolitical landscape had changed – the rest of the world moved on. However, some Polish soldiers continued to fight, joining WiN and different partisan groups in forests. From a more academic point of view, fighting at this stage may seem irrational, if not suicidal, but it had an emotional logic. In Poland, one occupying force had simply been replaced by another. Some describe this period as a civil war. The last of the 'doomed soldiers', Józef Franczak, was killed in 1963.

Even those who tried to rebuild or start 'normal' civilian lives were rarely able to do so: the majority of Home Army soldiers were persecuted and imprisoned at some point, and many were executed in the years of Stalinist repression that followed. Polish soldiers returning from the West did so at their own peril, and they too were often arrested and prosecuted as 'traitors'.

Reading about the lives and profoundly unjust fates of Emil 'Nil' Fieldorf, executed in 1953, or Captain Witold Pilecki, executed in 1948, and so many others, is heartbreaking. But in the years that would follow, speaking publicly about the Warsaw Uprising was not allowed. "Not a word about the rising. Not a word about the Home Army. As if we never existed," Wanda Traczyk-Stawska recalled. Only with the fall of communism did this change. In Poland today, the rising is a subject of constant, passionate debate and public discourse, yet it still remains relatively unknown in the West.

The Warsaw Uprising and its aftermath remains not only crucial to understanding WWII and Poland today, but is also part of our shared European history: it is the story of the Allies who fought for freedom – and lost.

**"THE EXACT NUMBER OF
PEOPLE WHO PERISHED
IN THE UPRISING WILL
REMAIN UNKNOWN"**





The Warsaw Uprising involved many combatants, including women and children. These Polish boys participated in the fighting



JAPAN'S DOOMED FLAGSHIP

In 1945 this super battleship embarked on a desperate mission to halt the American landings on Okinawa

7 APRIL 1945



WORDS MARC DESAMIS

A grey leviathan looms in the midday light. The battleship's great guns are silent but exude a palpable aura of menace. It drives southwards over the waves of the East China Sea at 20 knots towards its final destination, Okinawa, where an armada of American ships lies offshore overseeing the invasion of the island. Yamato, the pride of the Imperial Japanese Navy (IJN), is a 70,000-ton super battleship, the first of her class and flagship of the Combined Fleet. It is far superior to any other warship afloat.

Yamato is under orders to ravage the American ships off Okinawa with her gigantic 47-centimetre (18.1-inch) guns, beach herself and fight to the death in the same spirit as the kamikaze pilots who at that moment exact a frightful toll on the US Navy's warships. Okinawa is an island in the Ryukyu chain, and the last

stepping stone for the US forces before the Japanese Archipelago lying 560 kilometres (350 miles) away. It is here that the battleship is expected to live up to her name, Yamato – a word that embodies the essence of the Japanese nation and people.

However, the flagship will never reach its destination. It is just past noon, 7 April 1945, and Yamato is still 400 kilometres (250 miles) to the north west of Okinawa. US Navy warplanes have found her. They are circling, visible through gaps in the clouds – midnight-blue angels of death casting judgement over the battleship and her nine escorts. On Yamato's bridge stands a young assistant radar officer, Ensign Mitsuru Yoshida. He is 22 years old and had been a law student at Tokyo Imperial University just two years before, when he was called to serve his emperor. Unlike almost all of his fellows aboard Yamato, he will

survive the calamity that is about to overtake the vessel. After the war he will write a book about the doomed ship and her crew.

Operation Heaven Number One, 31 Ton-tan-ki, in Japanese, has little chance of success. The mission has been conceived as a means of restoring a measure of honour to the Combined Fleet, which has been shamed by its inaction around Okinawa compared to the kamikaze attacks of Japan's death-seeking pilots. "But where is the navy?" Emperor Hirohito asked Admiral Koshiro Oikawa, his most senior naval adviser, at a 29 March meeting concerning the fighting. "Are there no more ships? No surface forces?" Oikawa was mortified by the implication that the navy, most of whose ships now lie at the bottom of the Pacific Ocean, was not doing enough. So on 6 April Yamato sailed from Kure Harbour to die at Okinawa, covered in glory for the good of the navy. The fate of

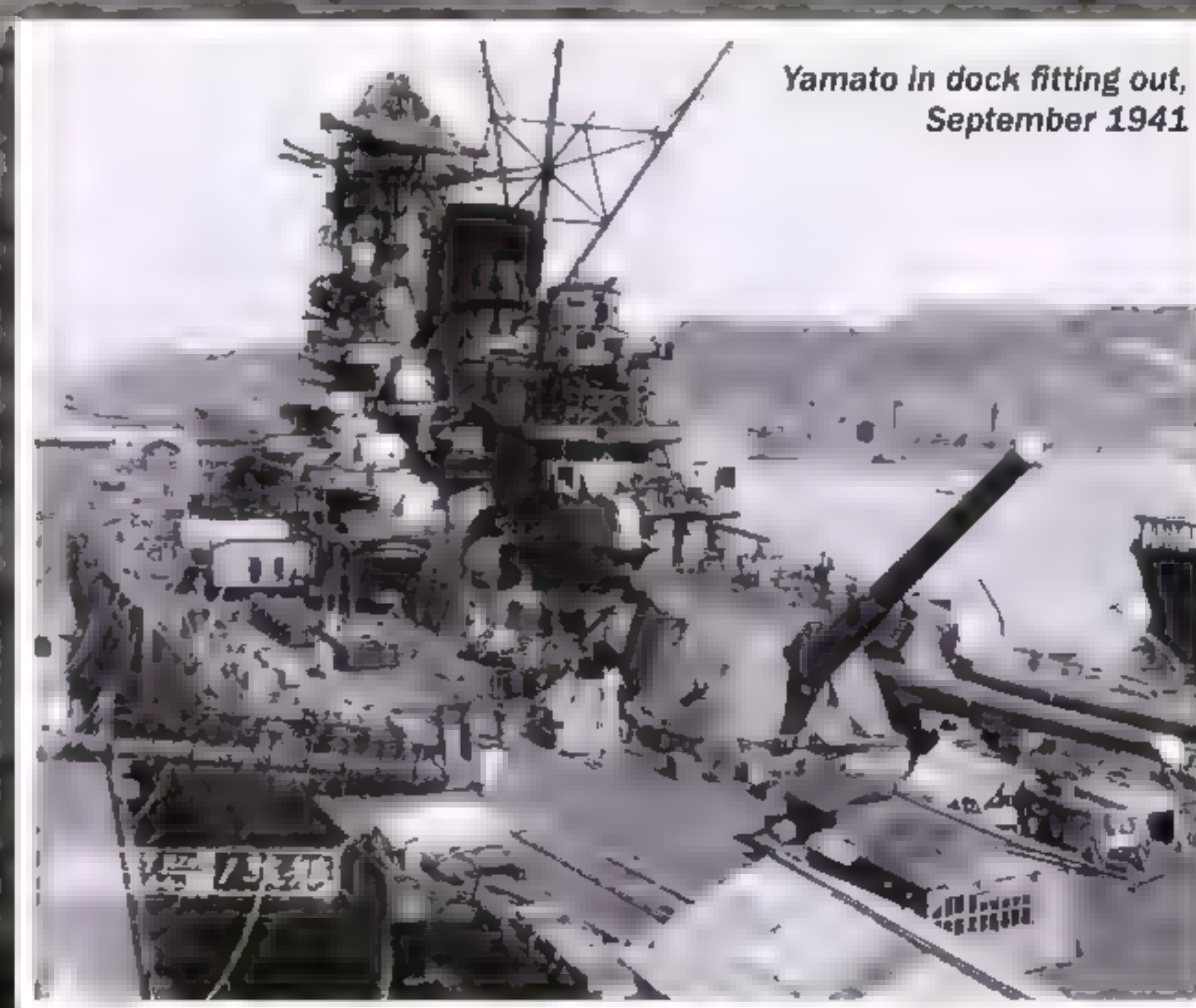
ATO



*The Japanese super battleship Yamato
undergoing sea trials in late 1941*



*Yamato's senior officers prior to the
start of Operation Ten-ichigo*



*Yamato in dock fitting out,
September 1941*

THE MIGHTY BATTLESHIP YAMATO

Yamato was enormous, measuring 263m (863ft) stem to stern. She displaced 70,000 tons and was 40 per cent bigger than the battleships of the Iowa class the US Navy's largest. Her superstructure, dominated by the mast and raked funnel, was like a fortress bedecked with guns. Enough steel went into the hull to lay a railway track between Tokyo and Osaka. Yamato bore a full load of munitions for all of her weapons on 7 April 1945.

TYPE 96 25MM ANTI-AIRCRAFT GUNS

Yamato had 152 Type 96 25mm (0.98in) anti-aircraft guns, with 50 in triple mounts and two single mounts.

FUNNEL

AIRCRAFT CATAPULTS

TURRETS

STERN

NAKAJIMA SCOUT AIRCRAFT

The Yamato embarked seven Nakajima floatplanes to conduct reconnaissance. They were launched from catapults at the stern of the ship.

TYPE 89 127MM GUNS

The Yamato carried six Type 89 twin 127mm (5in) naval guns, with three on each side of the citadel.

ENGINES

Yamato was powered through the waves by four propellers connected to four steam turbines and driven by 12 boilers, which produced 150,000 shp. It gave her a top speed above 27 knots.

the navy rests on this one action," her crewmen were portentously told as they departed.

Despite her awesome power, Yamato has seen little combat, having engaged the Americans briefly during the Battle of Leyte Gulf in October 1944. The ship has been outmoded since the start of the Pacific War. The strike on Pearl Harbor on 7 December 1941 proved that aircraft carriers, not battleships, were now the arbiters of war at sea. A mere two days later, the Japanese confirmed the vulnerability of surface warships to aircraft when their planes struck and sank the Royal Navy's HMS Prince of Wales and HMS Repulse. Surface ships, however powerful, were extremely vulnerable to air attack unless themselves protected by fighters, and so for much of the war Yamato has been kept sheltered in home waters, awaiting a decisive battle with American battleships that will never come.

The Surface Special Attack Force is under the overall command of Vice Admiral Seiichi Ito, who uses Yamato as his flagship, while the ship herself is under the direction of Captain Kosaku Ariga. Ito is aghast at what he considers the purposeless waste of his ships and the lives of his men, but he keeps such thoughts from them. Yet the crewmen of Yamato are under no illusion that Ten-ichigo can end in anything besides her destruction. It is a suicide mission. They have been ordered, preposterously, that if they manage to survive long enough to reach the island, they are to arm themselves and go ashore to continue the fight. Many sailors,

aware of what is to come, have written their last letters home to their loved ones.

Awaiting Yamato and the ships of the Second Destroyer Squadron that accompanies it on this death ride is the US Fifth Fleet, riding high at the peak of its wartime might. The Yamato crewmen know they have been spotted by an American submarine, but they are deeply upset that the Americans have radioed their position to the rest of the fleet without even encoding the message, as if they are not taking the great battleship seriously enough.

On Yamato, rice balls and black tea are served to the crew, who sing patriotic songs and shout "Banzai!", the traditional Japanese battle cry. Ariga, a popular captain, allows some of his younger officers to affectionately pat his bald pate. There is a limit to the levity, however. In contemplation of the swarm of American aircraft that is sure to assail them, one sailor asks morbidly but with true prescience, "Which country showed the world what airplanes could do by sinking Prince of Wales?"

"ITO IS AGHAST AT WHAT HE CONSIDERS THE PURPOSELESS WASTE OF HIS SHIPS AND THE LIVES OF HIS MEN, BUT HE KEEPS SUCH THOUGHTS FROM THEM"

Ensign Yoshida finds that one of his fellows, Ensign Sakei Katono, is reading Leo Tolstoy's *War and Peace*, while Yoshida buries himself in a biography of Baruch Spinoza. He also sees that another ensign, Kunio Nakatani, is weeping into his pillow. The assistant communications officer aboard Yamato is a Japanese-American from California who was studying in Japan and had the misfortune to find himself stranded there when the war began. He has received, at long last – just before Yamato sailed on her final voyage – a letter from his mother in America, that reaches him via neutral Switzerland. He will never see her again.

A reconnaissance plane operating off the aircraft carrier USS Essex spies the flotilla at 8.15am on 7 April. Over the following four hours, the Americans doggedly track Yamato and the other ships of the flotilla. Admiral Raymond Spruance, commanding officer of the Fifth Fleet at Okinawa, at first decides to keep his carrier fighters close by to provide cover against the swarming kamikazes and instead sends a powerful squadron of battleships to confront the onrushing Japanese ships. Yamato, it seems, will finally get to fulfill her purpose and duel valiantly with her American peers.

Then Spruance cancels his order. Vice Admiral Marc Mitscher, the commander of the carrier aircraft of Task Force 58, convinces him that his planes will be better dealing with the immense Japanese warship. At 10.00am 280 planes from no fewer than ten aircraft carriers launch themselves into the leaden Pacific sky,

RADAR

Three different radar sets were carried by the battleship, including a Type 13 air search radar, Type 21 air and surface search radar and a Type 22 surface search radar.

TOWER**CITADEL****MAIN GUNS**

The main armament of Yamato consisted of nine Type 94 46cm (18.1in) naval cannons mounted in three turrets. These guns, each weighing 162 tons, were the largest ever emplaced on a ship, and were capable of hurling a 1,400kg (3,200lb) shell to a maximum range of 4km (135,000ft). The ship carried 1,080 of these. Each triple turret weighed a hefty 2,774 tons.

ARMOUR

The Yamato possessed substantial protection, carrying 22,500 tons of armour – the most ever placed on a warship. Covering the armoured citadel was a 41cm (16in) main belt of armour that extended below the waterline. The lower belt that protected the ammunition magazines was 28cm (11in) thick. The three main gun turrets had frontal armour of 66cm (26in) thickness, while the deck had armour of up to 23cm (9in).

BOW**155MM DUAL-PURPOSE NAVAL GUNS**

The secondary armament of Yamato consisted of six 155mm (6.1in) cannons in two triple gun turrets. They were capable of taking on targets in the air and on the surface.

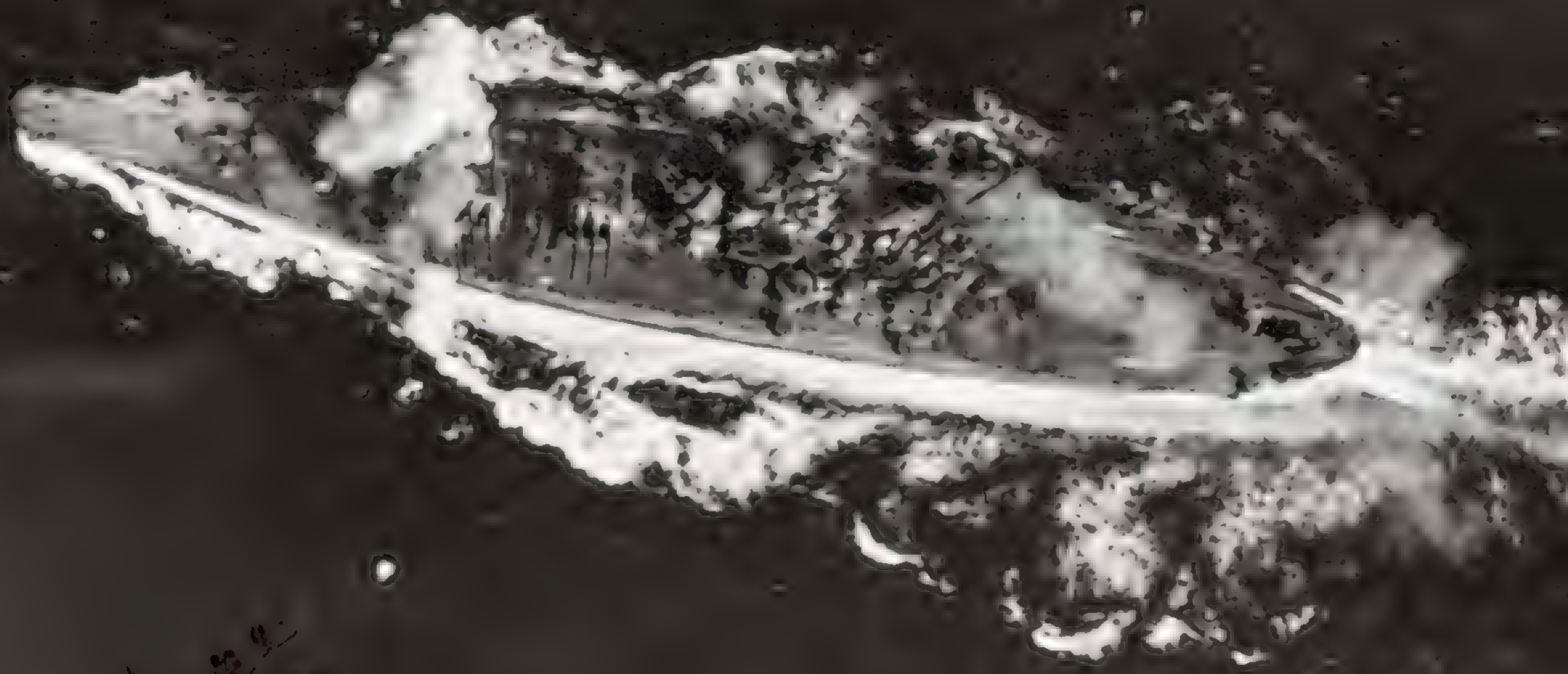
CREW

The Yamato required an enormous crew of some 3,300 men to operate her. Most were berthed below deck ahead of the forward turrets. Crew accommodations were relatively generous, earning her the nickname 'Hotel Yamato'.

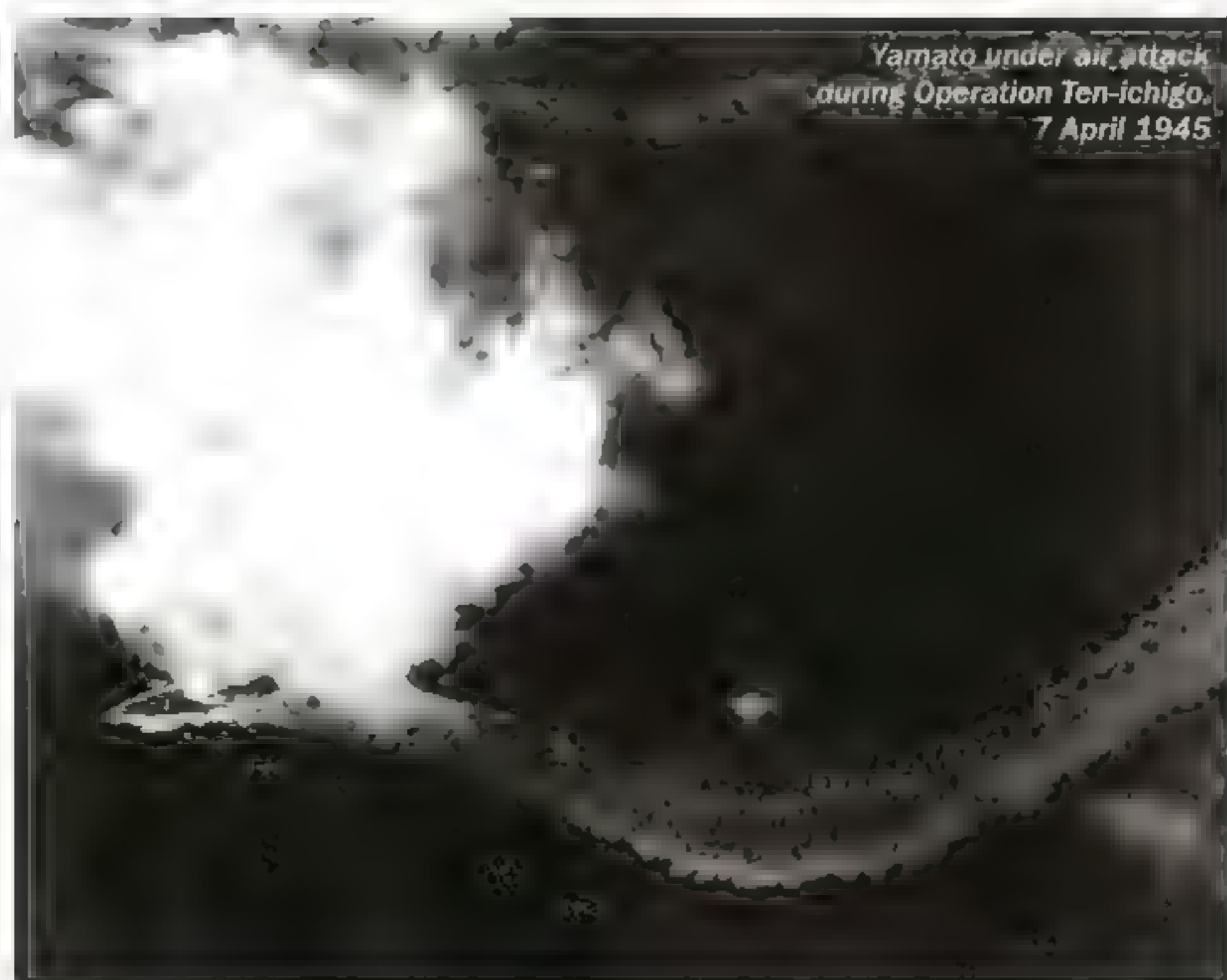
"AT 10.00AM 280 PLANES FROM NO FEWER THAN TEN AIRCRAFT CARRIERS LAUNCH THEMSELVES INTO THE LEADEN PACIFIC SKY, DESTINED FOR A BLOODY RENDEZVOUS WITH YAMATO"

Curtiss Helldivers fly over an American aircraft carrier in 1945. Carriers had surpassed battleships as the dominant force on the oceans by WWII

"YAMATO'S EXECUTIVE OFFICER, REAR ADMIRAL NOBII MORISHITA, CAN'T HELP BUT ADMIRE THE PROFESSIONAL COMPETENCE OF THE ATTACKERS. 'BEAUTIFULLY DONE, ISN'T IT?' HE SAYS"



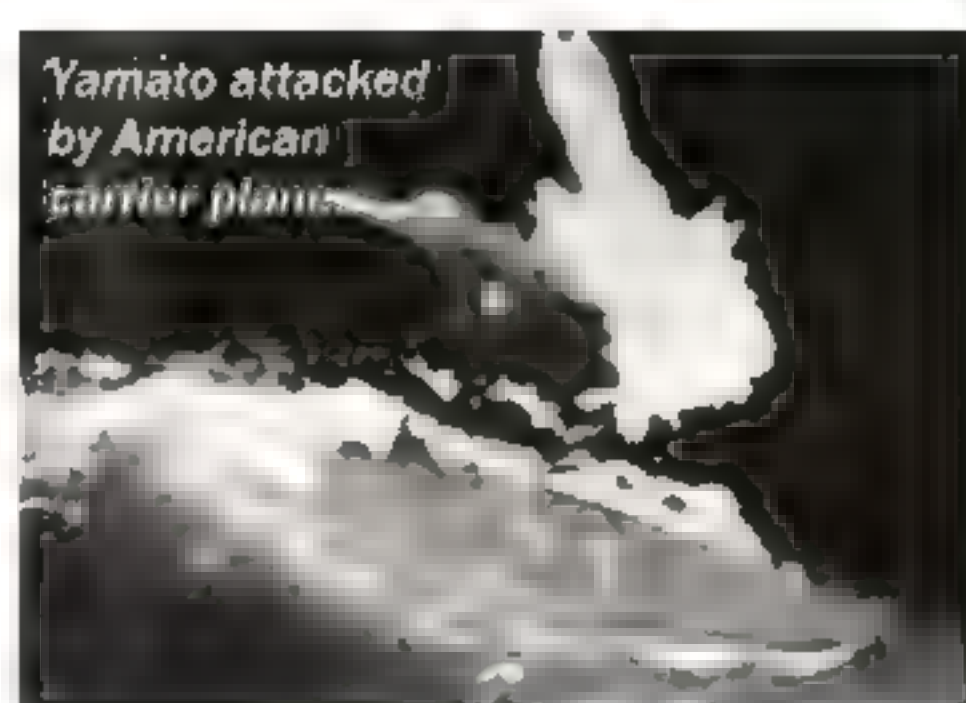
The Yamato receiving direct hits from US planes during the attack on 7 April 1945



Yamato under air attack
during Operation Ten-ichigo,
7 April 1945



Curtiss Helldivers go on
the attack, 7 April 1945



Yamato attacked
by American
carrier planes



The end of Yamato, Operation
Ten-ichigo, 7 April 1945

destined for a fateful rendezvous with the approaching Yamato.

At 12.00pm Admiral Ito sits on the bridge of Yamato and smiles. He says cheerfully, "We got through the morning all right, didn't we?" The battleship's good fortune will not last long. Just 20 minutes later Yamato's air search radar detects the approaching American aircraft. The Japanese ships are bereft of fighter cover. Their only defences will be the anti-aircraft guns aboard. Then the attacks begin – the first wave of many in a sea of fire and smoke.

Yamato's anti-aircraft batteries and those of her escorts open up in defence. The ferocious fire sent skyward – a prismatic, tracer-lit torrent of searing metal – does the Japanese ships little good. The Americans manoeuvre their machines with great skill. Yoshida grimly observes that their highly trained pilots fly in a straight course only long enough to drop their bombs or torpedoes, then hurriedly zigzag away. The sheer number of aircraft also works in the Americans' favour, as the Japanese gun crews find themselves overwhelmed with a multiplicity of fast-moving targets.

In all, 364 American carrier aircraft pounce on Yamato and the ships in her escort. The light cruiser Yahagi, the lead ship of the Second Destroyer Squadron, goes down after being struck by seven torpedoes and 12 bombs, while US aircraft also hammer the destroyers. It is Yamato, however, that receives the greatest attention from the American fliers. They concentrate their torpedo strikes on the port side of the ship to cause her to list quickly.

Wave after wave of Avenger torpedo bombers and Helldiver dive bombers, protected by Corsair and Hellcat fighters, surge over Yamato. Yamato's executive officer, Rear Admiral Nobii Morishita, can't help but admire the

"THE FEROCIOUS FIRE SENT SKYWARD – A PRISMATIC, TRACER-LIT TORRENT OF SEARING METAL – DOES THE JAPANESE SHIPS LITTLE GOOD"

professional competence of the attackers. 'Beautifully done, isn't it?' he says. She is hit by one torpedo after another. Between 11 and 13 strike her, together with no fewer than eight bombs. There are many more near-misses, and she lists worryingly to port. She takes on thousands of gallons of seawater to counter the listing, but to little avail. The waves crash over her port side. At 2.10pm a bomb strikes her rudder, damaging it and knocking out all power in the ship. She can no longer manoeuvre. Yoshida spies a thin, human-sized length of flesh dangling from a rangefinder. Her crew has been equally savaged.

Another wave of enemy planes bears down on Yamato. "Don't lose heart," Captain Ariga keeps urging the surviving men on the bridge. But there is no hope for Ten-ichigo. Admiral Ito's flotilla has been shredded by American airpower to no purpose, just as he had expected. Like Yahagi, most of the destroyers have been smashed. He calls off the operation and commands his remaining ships to return home after picking up survivors of disabled ships. After giving this order, he goes to his cabin and closes the door behind him. He will never emerge. Captain Ariga calls his crew to Yamato's deck as water floods the stricken vessel and orders them to abandon ship.

He will not be leaving with them. Ariga binds himself to a binnacle so that he will go down with his ship. "Long live the emperor!" he cries.

Yamato's severe list is now reaching an astonishing 90 degrees to port. As she continues to roll, the giant shells she stows for her main guns slip and slide in their magazines, their fuses striking bulkheads and overheads. They begin to detonate. By 2.23pm Yamato is completely upside down and begins to sink. The greatest of these blasts consumes her, sending up a mushroom cloud of fiery smoke that can be seen all the way back in Japan.

Ensign Yoshida is indescribably lucky. The plunging Yamato was about to pull him under in its whirlpool when this final explosion propels him back to the surface. He will live. The remains of the battered Yamato finally sink in 883 metres (2,700 feet) of water. Yoshida, who will become a bank executive after the war, is plucked from the oil-choked water by the destroyer Fuyutsuki. He writes his *Requiem for Battleship Yamato* years later, calling Ten-ichigo "An operation that will live in naval annals for its recklessness and stupidity."

The Japanese navy loses seven ships in Ten-ichigo, including Yamato, along with 4,250 sailors. Only three destroyers escape the carnage. The US Navy's losses are much lighter – a mere ten warplanes and 12 airmen. When Emperor Hirohito learns of the failure of the operation and the loss of Yamato, he raises his hand to his head and sways. "Gone?" he says in shocked disbelief. "She's gone?"

The Okinawa invasion will not be stopped. It continues until late June, when the last Japanese resistance is crushed. Of the 3,300 crewmen of Yamato, just 269 survive. Her dead are the among the first casualties in the Okinawa campaign. They are not the last.

A large, rusted metal wreck of a Japanese Mitsubishi G4M light bomber lies on the sandy ocean floor. The aircraft is partially covered in green and brown coral growth. The background shows a deep blue sea with more coral structures visible in the distance.

WAR_{in} **FOCUS** **MITSUBISHI-SEA**

Taken: November 2003

A Japanese light bomber sits among the corals at the bottom of Chuuk Lagoon in Micronesia, where it has remained for over 70 years. The Mitsubishi G4M was a lightly armoured bomber deployed by the Imperial Japanese Navy, known by the Americans by the call sign 'Betty'. It is thought that hundreds of such wrecks lie on the ocean floor, most undiscovered to this day.





BAILING OUT OVER 'NAM

**AN INTERVIEW WITH COLONEL
VIC VIZCARRA (RETIRED, USAF)**

WORDS TOM GARNER



American pilot Vic Vizcarra flew F-105 Thunderchiefs during the Vietnam War and survived anti-aircraft guns, surface-to-air missiles and ejecting from his aircraft over enemy territory

Captain Vic Vizcarra pictured in front of an F-105 Thunderchief during the Vietnam War. Vizcarra was a 'Thud' pilot who flew 59 combat missions in the F-105

The Vietnam War became synonymous with the distinctive sound of 'Huey' helicopters, but the use of jet fighters was a huge part of the American military strategy against North Vietnamese forces. The air war was decisively fought in America's favour, with a heavy emphasis on bombing missions over North Vietnam.

Nevertheless, American pilots were not immune from risk because the North Vietnamese were supplied by the USSR with MiG fighters. More importantly, US aircraft came under the most destructive attack from anti-aircraft guns and new surface-to-air missiles. Consequently, over 1,400 American warplanes were shot down over North Vietnam between 1965-68.

One of the pilots who fought against the dogged North Vietnamese air resistance was Captain Vic Vizcarra of the United States Air Force. Vizcarra flew hundreds of missions during the war, 59 of which were combat missions in F-105 Thunderchiefs with 80th and 354th fighter squadrons. Vizcarra experienced many dramatic incidents while flying in the F-105 but managed to survive a uniquely modern conflict where technology became the face of a hidden but determined enemy.

Deployment to Southeast Asia

Vizcarra had always wanted to fly and was greatly influenced by his older brother. "I got bitten by the flying bug at the age of six and knew that I not only wanted to fly but to fly fighters. I was greatly influenced by my older brother, who was 15 years older than me and flew in World War II. My dad would tell me stories about him fighting the bad guys and I said, 'How do you fight the bad guys?' He said, 'You fly an airplane.' That got me into aviation and I knew that's what I wanted to do."

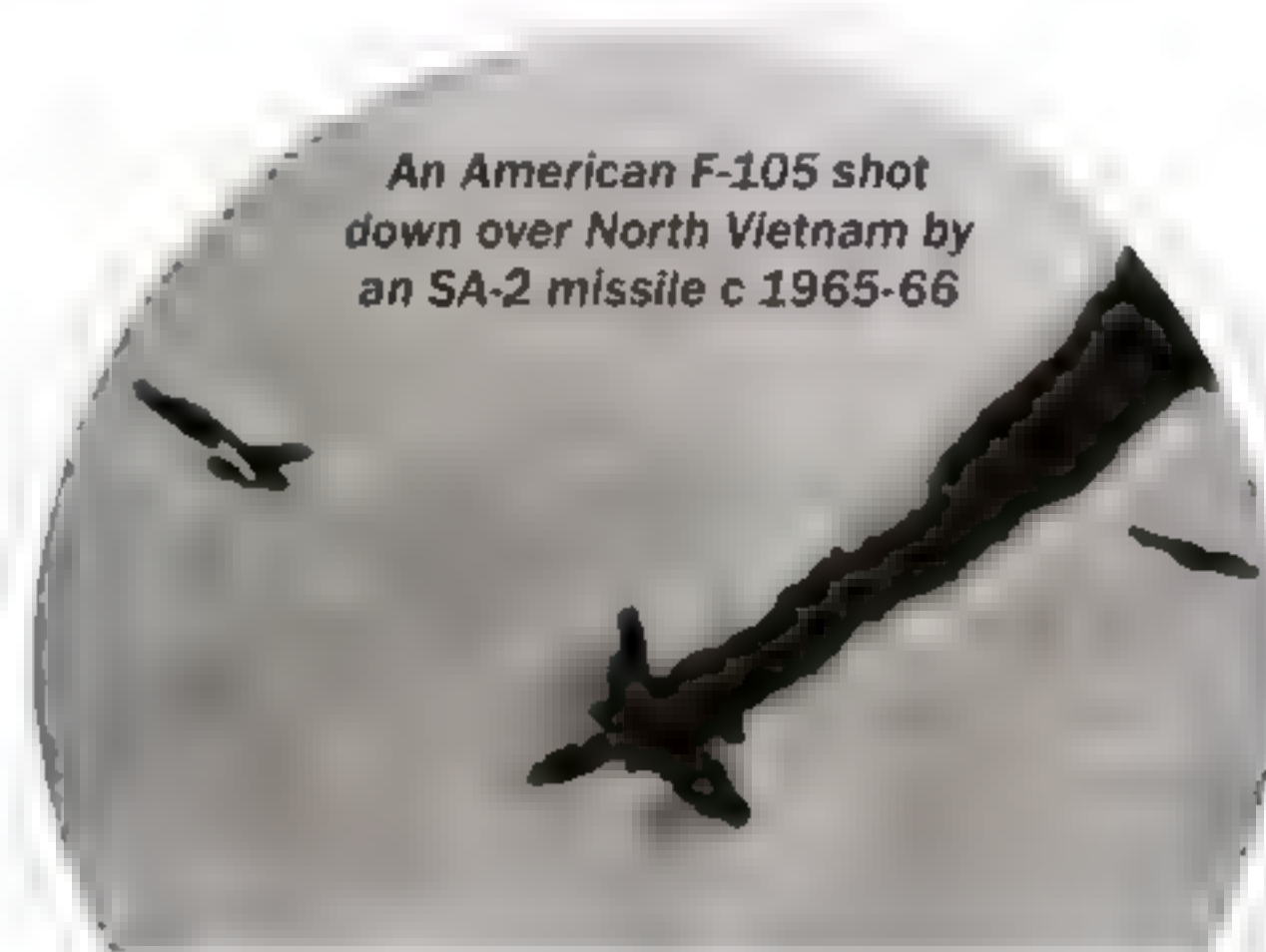
Having joined an officer training corps program, Vizcarra was commissioned as a second lieutenant in January 1960 and began flying fighter jets. He built up his flying hours and even found himself caught up during the Cuban Missile Crisis in 1962 while stationed at Okinawa, Japan. By the time Vizcarra was deployed to the Vietnam War to fly F-105 Thunderchiefs in October 1964, he had accrued hundreds of hours of flying experience and

spent a large amount of his first deployment escorting reconnaissance aircraft over Laos.

Based in Korat, Thailand, from October-December 1964, Vizcarra recalled the enthusiasm he shared with his fellow pilots for the opportunity of active service: "I was biting at the bit to get in there because, until you've been shot at, you really don't know what it's like. We were all keen to go, and during the first few days of combat we thought that it was exciting and the adrenaline was pumping. It wasn't until people started getting hit that all of a sudden you thought, 'Wait a minute, this is serious.'"

While conducting an airstrike over Laos on Christmas Day 1964, Vizcarra remembered feeling a "tinge of remorse. It really hit me, because we were celebrating the birth of peace, Jesus Christ, but dropping bombs."

Although Vizcarra had been flying active missions since October 1964 he didn't receive his first taste of combat until 19 July 1965.



An American F-105 shot down over North Vietnam by an SA-2 missile c 1965-66

"MY DAD WOULD TELL ME STORIES ABOUT HIM FIGHTING THE BAD GUYS AND I SAID, 'HOW DO YOU FIGHT THE BAD GUYS?' HE SAID, 'YOU FLY AN AIRPLANE.' THAT GOT ME INTO AVIATION AND I KNEW THAT'S WHAT I WANTED TO DO"

By then based at Takhli, Thailand, Vizcarra's mission was a bombing flight against North Vietnamese army barracks at Vinh. Flying at a speed of 550 knots [1,019 kilometres per hour], he remembered, "I messed up. I was suddenly in a plane with eight 750-pound bombs and when you release them, they don't all release at the same time. If they did there was too much chance of the bombs colliding with each other. When you release the bombs simultaneously there is a 120-microsecond separation between each bomb. When I hit the release button I didn't hold it until all the bombs had gone. I pushed the button real quick, and once we left the target I still had two bombs left on the bomb rack."

Adrenaline played a large part in Vizcarra's first combat mission: "Because of the butterflies and the excitement of being in combat for the first time I really didn't know the target and was a little slow. I messed up again coming out of a dive recovery and was grinning from flying so fast."

Operation Spring High

One of the military firsts of the Vietnam War was the aggressive use of surface-to-air missiles. Known by the Americans as 'SAMs', North Vietnamese forces had first used these weapons in April 1965 and a rigorous debate ensued within the US government on how to deal with them.

The threat became real on 24 July 1965 when a SAM shot down an American F-4 aircraft, and the danger to US pilots increased. Vizcarra explained, "We couldn't attack SAM sites up to that point. The head of the CIA had recommended to President Johnson many times that the SAM sites should be taken out before they became a really serious threat. Unfortunately, Robert McNamara, the secretary of defense, was opposed to the idea because he was concerned that it would be seen as an escalation of the war. He would always overrule military advice, and Johnson would always side with McNamara. As we were flying our missions we could see these SAM sites being constructed but we couldn't attack them. It was not until the F-4 was shot down that Johnson finally approved to take them off the 'Do Not Attack' list."

Because of McNamara's reluctance to destroy SAM sites, Vizcarra and his fellow



F-105s taxiing to the arming area before taking off on a combat mission

pilots despised him for putting their lives in danger. "Many military people did not hold McNamara in high regard. I would later tell my children when they were growing up, 'Hate is a very harsh word and you need to reserve it for people that you really do hate.' However, I have to admit that I hated McNamara."

On 27 July 1965, 48 'Thuds', including Vizcarra's, were finally ordered to attack two SAM sites in North Vietnam on a mission called 'Operation Spring High', which was the first counter-airstrike against SAM sites in the history of aerial warfare. Vizcarra approached this mission with trepidation. "I was really feeling fear. There were supposed to be 48 aircraft simultaneously hitting two SAM sites that were three miles [five kilometres] apart, and this was the first time we had gone against them. I was in the final flight of six flights from Takhli. Two aircraft from the first and third flights got shot down and I could hear it, we were all on the same frequency, so I found the target under quite stressful conditions."

Armed with napalm, Vizcarra's target was a barracks housing personnel that manned a SAM site near Hanoi. Descending to 31 metres (100 feet), Vizcarra flew down the Red River valley and was exposed to anti-aircraft fire. "It was really wide, flat terrain and you couldn't use it to hide. We were out in the open and flak burst right over our heads, which forced us to descend even

"THE MISSION WAS SO STRESSFUL THAT VIZCARRA WAS GIVEN A SHOT OF WHISKEY TO CALM HIS NERVES UPON HIS RETURN: "IT WAS THE ONLY MISSION WHERE I WAS SERVED 'COMBAT WHISKEY'"

lower. The closer we got to the target the lower it would get and my flight lead got so low that he probably got within 20 feet [six metres] of the ground. As we approached the target we had to climb to 50 feet [15 metres] to release our weapons at the target."

Vizcarra and his flight were now flying at extremely high speeds at a very low altitude. "It took us between 5-6 minutes to travel 50 miles [80 kilometres]. I remember turning at the Red River valley and we were about 50 miles from the target and going at 500 knots [926 kilometres per hour], which was close to eight miles a minute."

Once he reached the SAM site, Vizcarra's flight deployed their weapons. "Half the strike

force was armed with 'CBU', which were intact pieces of bomb nuts. These would be torn into thousands of pieces and used to destroy soft targets such as armoured trucks or personnel. Two flights would give the SAM sites CBU and one flight went with napalm. I was carrying napalm so we dropped it and destroyed the barracks," Vizcarra explained.

The mission was so stressful that Vizcarra was given a shot of whiskey to calm his nerves upon his return: "It was the only mission where I was served 'Combat Whiskey'. At the end of a flight, the flight surgeon would open up his whiskey cabinet and pour each guy a shot. I'm not a whiskey drinker, but I was so tense from that mission that the gentleman came up my ladder before I'd even unstrapped and handed me a shot. I didn't ask what it was, I just took it and it burned my throat!"

Anti-aircraft fire

Days after destroying the SAM site, Vizcarra came under fire from 37mm triple-A anti-aircraft guns while flying at 1,370 metres (4,500 feet) around the Laotian-North Vietnamese border on 3 August 1965. Vizcarra's target was a bridge, and he recalled seeing anti-aircraft fire flying up towards him: "The 37mm looks like a large, glowing orange golf ball, and you could see them streaking up beneath you. When they sprung them there was a white puff, and I was



A flight line of F-105s at Takhli Royal Thai Air Force Base in late 1965



A 37mm triple-A gun emplacement manned by North Vietnamese troops. Vizcarra recalled that these guns would fire rounds that looked like large, glowing orange golf balls



An intelligence target photo, provided to each mission pilot for the first airstrike against a SAM site in military aviation history, July 1965

F-105s conduct a bombing run above low cloud formations, North Vietnam, 14 June 1966

"EVERYBODY LOVED THE FACT THAT IT WAS FAST AND COULD OUTFLY MIG-17S WHILE FULLY LOADED"



Left: An F-105 in flight with a full bomb load of 750lb bombs. This aircraft was later shot down over Laos on 24 December 1968

FLYING A 'THUD'

THE REPUBLIC F-105 THUNDERCHIEF FLEW THE MOST AMERICAN BOMBING MISSIONS DURING THE VIETNAM WAR AND WAS A FORMIDABLE AIRCRAFT

With a top speed of 2,237 kilometres per hour (1,390 miles per hour) and a maximum bomb load of over 5,442 kilograms (12,000 pounds), the F-105 conducted 75 per cent of bombing missions over North Vietnam. Developed in the mid-1950s, this supersonic fighter-bomber was designed for low-level, high-speed attacks. It initially had a poor reputation and pilots nicknamed F-105s 'Thuds', which eventually became a term of endearment. With design modifications and improvements,

the Thud achieved great performance capabilities that enabled it to carry the heaviest conventional weapons further than any other fighter-bomber. It was faster than most opposing aircraft and was able to sustain heavy damage.

The F-105's weapons system was formidable. Vizcarra recalled, "It could carry a variety of weapons, most commonly eight 750-pound bombs. As the war got more serious with SAMs we had defensive weapons, such as electronic

countermeasure pods. We could also carry two 3,000-pound bombs, which was a huge weapon."

Vizcarra remembered the Thud with affection: "I definitely loved flying the F-105. It had an extremely comfortable cockpit and was very stable. Everybody loved the fact that it was fast and could outrun MiG-17s while fully loaded. The Soviets initially armed the North Vietnamese with MiG-17s but they couldn't catch the F-105s. That's why they started giving them the MiG-21, their best fighter."



Three F-105s take off to go on a bombing mission over North Vietnam in 1966. In the early part of the war the F-105 was not camouflaged and had a silver coat



Left: F-105s refuelling over heavy cloud cover before heading to North Vietnam. Vizcarra's aircraft, 357, is pictured after taking on fuel

The 354th Tactical Fighter Squadron. Vic Vizcarra is kneeling on the second row, far right



An SA-2 surface-to-air missile. Vizcarra and his colleagues would joke that these fearsome weapons looked like "flying telephone poles"

DEFEATING A SURFACE-TO-AIR MISSILE

VIC VIZCARRA HAD TO FREQUENTLY COMBAT THE SA-2 MISSILE – A DANGEROUS WEAPON THAT REVOLUTIONISED AERIAL WARFARE

Developed by the USSR, the SA-2 was widely used during the Vietnam War. The heat-seeking missile used a two-stage rocket booster system and was fitted with a 197-kilogram (434-pound) warhead. Its range was up to 48 kilometres (30 miles) with a maximum height of 18,288 metres (60,000 feet).

The SA-2 was an innovative threat to American pilots in Vietnam, but Vizcarra explained that they could be successfully outmanoeuvred: "We referred to them as 'flying telephone poles'. They were easy to spot and luckily they were large enough that you could see them coming at you. You had to take defensive manoeuvres, and with hard manoeuvring you could out-run it, but that's not how you would defeat it."

Defeating a SAM required skilful flying. "When you saw a SAM coming at you, you had to see the launch so you could spot it early because they spewed a lot of burst and smoke. The burst would

put out a large flame, so as soon as you spotted one you really had to put it off. You'd manoeuvre to a three or nine o'clock position so that it came at you from the side. The SAM always launched to a high altitude, so it would start off high and turn down towards you. As soon as you saw it you had

"ONCE YOU GOT IT COMING DOWN TOWARDS YOU, YOU WOULD PULL BACK UP. IT WOULD TRY AND FOLLOW YOU BUT IT COULDN'T DO IT BECAUSE IT HAD VERY SMALL WINGS"

to put your nose down to force it to do a bigger turn towards you. Once you got it coming down towards you, you would pull back up. It would try and follow you but it couldn't do it because it had very small wings. So as it tried to pull back up it would just tend to stall out and tumble. That's the way you would defeat a SAM."

Vizcarra recalled that surviving these missiles was different from standard anti-aircraft fire: "It made it very personal. Because the North Vietnamese would shoot at you with triple-A fire, they would just put up a large barrage and hope that you'd run into it. A SAM is looking right at you, it's got your lead and it's going after you, so it's much more personal. To be honest though, the SAMs were not very effective at all. You could defeat them, and for the whole Vietnam War their effectiveness rate was actually less than 1.2 per cent."

"THEY APPEARED TO BE VERY CAPABLE LEARNERS. THE RUSSIANS TRAINED THEM, AND BECAUSE THEY WERE OPERATING THE SAMs THEY KNEW HOW TO USE SOPHISTICATED EQUIPMENT"



rolling in on a wooden bridge. I could see the orange golf balls flying all over me, and when I released my weapons I started pulling to recover from my dive and rolled to the left."

During this engagement, while under fire, Vizcarra thought his aircraft had been hit: "Once I rolled up and was climbing out I looked over to my left and three feet [0.9 metres] of my leading-edge wing flap was missing. You could see that it had torn off so I thought I'd been hit. But after looking at the damage back at base it became obvious that the pressure equalisation valve in the drop tank had failed during the dive on the bridge and it had imploded."

Mechanical problems would later cause Vizcarra even more worrying problems, but it was the constant flying that was beginning to induce stress. During what was his second deployment over Vietnam, Vizcarra regularly began attending Mass: "When you get shot at, you get very religious all of a sudden. There was a very small circle of guys that thought they were invincible and were always biting at the bit to lead the dangerous missions. Then the junior pilots, where I placed myself, strapped up everyday, day after day. You felt that, 'This could be the guy going to be hit, not me.' If you ever thought you were going to be hit all the heart went. There was also a very small circle of those who

thought they weren't going to make it and actually asked to be relieved of duty. I needed religious faith to give me the courage to go day after day."

Conversely, Vizcarra admitted that flying combat missions was "really addictive because of the adrenaline. It was like the challenge and excitement of scoring in rugby. As long as you weren't getting knocked out and getting hit it was exciting, particularly when you're on a roll and flying some pretty interesting missions. You had a lot of anxieties going to the target, but there was a great feeling of satisfaction coming home and accomplishment that you shot the target."

For Vizcarra, this addiction to combat missions was put into sharp perspective when he went on his third deployment between September–November 1967. "The more you did it, the more you wanted to do it – until I had the experience of bailing out."

Ejecting over enemy skies

By 1966, casualties were rising among Thud pilots and Vizcarra was losing colleagues in combat. "It got to be a

little bit troublesome, and the reality hits you that you may not come back."

He was also coming to respect the North Vietnamese forces: "They appeared to be very capable learners. The Russians trained them, and because they were operating the SAMs they knew how to use sophisticated equipment. They did things that Americans did not think was possible so they deserve recognition for being capable people."

Vizcarra was now taking part in 'Iron Hand' missions, with the objective to suppress enemy defensive systems, particularly SAMs. Thud pilots would deliberately challenge SAMs before airstrikes destroyed their sites. Dedicated crews in two-seater F-105Gs would act as 'bait' while wingmen such as Vizcarra would bomb the targets. By November 1966, "the North Vietnamese were establishing more and more SAM sites and putting them up from Hanoi down towards the south, and they kept moving them down there."

On 6 November 1966 Vizcarra went on an Iron Hand mission acting as wingman to an F-105G over a southern area of North Vietnamese SAM activity. Vizcarra and his lead aircraft were looking for three suspected SAM sites, but their flight turned into a fruitless search. On a return journey to the first site Vizcarra began having problems with his aircraft. "So far we had not been shot at by the North Vietnamese, so we started this journey back to the coast again to look at the first suspected site, but I got an engine compressor stall. If you got a compressor stall in the F-105 you knew there was something wrong with the engine."

Vizcarra initially believed he could nurse his aircraft back to base, but "after a short time it became obvious that I had an engine failure. It was still running but I could not maintain altitude or air speed, and I didn't realise how quickly it deteriorated. It wasn't until the flight lead said, 'Dip your flaps', which you needed when you're very slow, that I realised the plane wasn't flying anymore and I had to get out."

With the F-105's sudden engine failure, Vizcarra now had no choice but to eject over enemy territory: "I told them I was going to have to eject and I did. The ejection was surprisingly smooth and mild because I took it at such a slow air speed. I didn't panic and everything worked properly. The seat blew up and did a kind of somersault before the seatbelt was automatically disconnected."

Vizcarra was now parachuting over "extremely dense jungle" and prepared for a tree landing. "I was shocked at the sudden stop, and it knocked the breath out of me because I hit the trees very suddenly. I ended up hanging upside down with my right ankle wedged between a tree branch that was split like a 'Y'."

Now in a precarious position, Vizcarra did not know how high up he was from the ground. "Trying to get out of this tree took a lot of effort, and I was doing pull ups upside down to grab hold of this branch. I managed to pull myself up but then did something really foolish. North Vietnamese trees are very tall, and guys who had bailed out had hurt themselves not realising how high up they were and they would break bones from the fall. I did have a 200-foot [61-metre] lanyard in my parachute that you could use as a pulley to let you down, but with



Left: Major Art Mearns (1929–66) was Vizcarra's flight commander and leader who was listed as missing on 11 November 1966 and later declared killed in action. He was posthumously awarded the Silver Star for "gallantry and devotion to duty". Mearns's citation read that he had "reflected great credit upon himself and the United States Air Force"

An F-105 fires 2.75-inch rockets over enemy territory. Vizcarra would have performed similar manoeuvres during a mission in August 1965

"A DEAR FRIEND OF MINE HAD BAILED OUT A FEW MONTHS BEFORE ME AND WAS CAPTURED IMMEDIATELY. I SAW PICTURES OF HIM AND ALREADY KNEW WHAT HE WAS GOING THROUGH. I HAVE TO SAY THAT BECOMING A POW WAS NOT AN OPTION YOU WANTED"

the adrenaline pumping and the excitement of ejection I couldn't remember how to rig it up."

Vizcarra took a dangerous step to get down from the tree: "I dropped my helmet to determine how high I was and then let myself go. I was shocked when I landed within six feet [1.8 metres] of the ground! I must have dropped dozens of feet before I was hanging upside down and my head had been only feet above the ground. I couldn't tell from my position because the leaves were so thick, so that was really chancy what I did there."

A hostile environment

Once on the ground, Vizcarra had to be rescued as soon as possible, but that was easier said than done. He had landed in isolated jungle 33 kilometres (20.5 miles) southeast from the Mu Gia Pass on the Laotian-North Vietnamese border, which was used as a military route to infiltrate supplies to the Viet Cong. Vizcarra knew he could not be captured: "A dear friend of mine had bailed out a few months before me and was captured immediately. I saw pictures of him and already knew what he was going through. I have to say that becoming a POW was not an option you wanted."

Vizcarra immediately attempted to contact his flight lead on a survival radio: "In my excitement I pushed the lever and asked to talk, but it was poorly designed. I pushed the button right through 'Talk' into a beeper signal without realising it. So there I was standing there talking, when really I was sending out a beeper signal. My flight leader and I couldn't communicate because I was not using the proper mode."

Fortunately for Vizcarra, his flight leader found a way around the communication problem. "Luckily he was very smart. He started playing '20 Questions' where he would

Below: This UH-2A helicopter 'Royal Lancer' rescued Vizcarra from the jungle and probable capture



ask me a question and get me to answer by using the beeper. One beep was 'Yes' and two beeps were 'No'. We communicated like that for a while and he eventually said, 'We've got rescue on the way. Turn your radio off, save the battery and come back up in 15 minutes'."

Vizcarra was now alone and had to prepare for hiding and surviving in the jungle in case the rescue attempt failed.

Surviving in a cave

While he waited to be rescued, Vizcarra had to find immediate cover. "I sat there waiting for the time to go by and realised that, even though I was in really thick jungle I still was coming out in the open and needed to find a hiding place."

Vizcarra soon came across a large hill of karst to the north of his landing position and discovered many caves. "Karst is a type of lava formation, which is indigenous to that area. I was shocked how porous it was and had a selection of many caves to go into. I picked the one that was right in front of me and found that it was a good hiding place and hid in there."

There was no accurate way of knowing how long it would be before the rescue came, so Vizcarra had to rely on his survival kit. "One pilot spent 30 days in the jungle before he got rescued, so you had a poncho to keep yourself covered from the rain as well as a knife, plate, compass, mirror and fishing gear."

One particular item had a novel use: "There was a condom in the survival gear. I joked with a friend years later that it was there in case you had to sleep your way out of Vietnam, but it really wasn't. Your condom was to be used as an additional way to collect water even though you had cans of water in your gear."

While he was in the cave, Vizcarra reflected on his situation: "Up to this point I was reacting to my training, but I was now sitting waiting to be rescued with nothing to do. I suddenly started to think about my family and the terrible situation I was in. I resorted back to my faith again and said a little prayer, and sure enough as soon as I finished saying it I heard aircraft coming back. I felt like some of my prayers had been heard."

Rescue

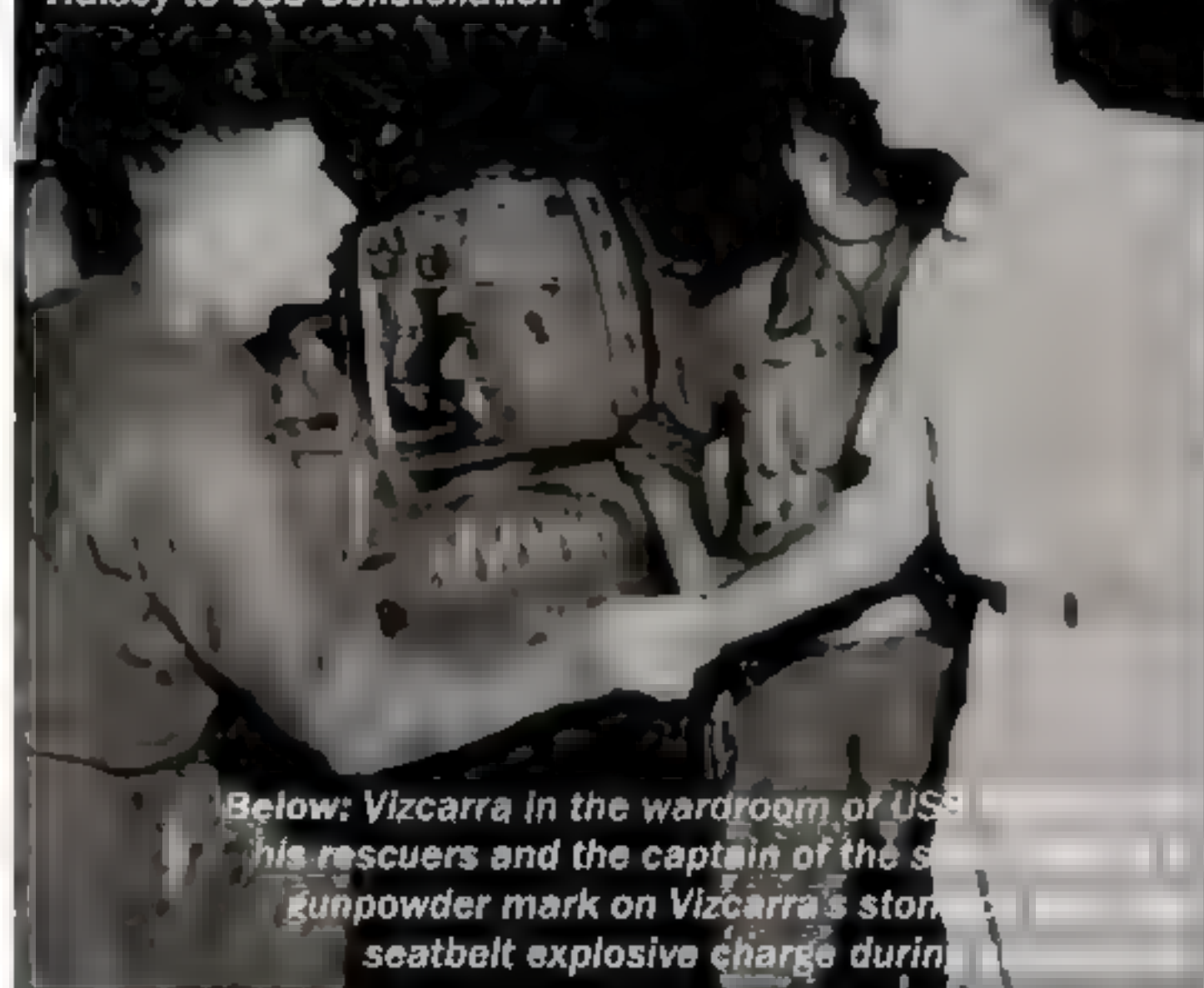
Vizcarra was being rescued by a US Navy helicopter, but the device the naval crew used to rescue him almost caused another accident: "The jungle rescue device is called a 'Tree Pole Trainer' and looks like an anchor as it's lowered through the trees. It had a safety harness but I didn't have enough strength in my thumb to open the clip all the way. It only partially opened or popped out. I heard the radio saying, 'Hurry up, we're low on fuel, let us know when we can pull you up.' That made me even more nervous so I wrapped this cable around me."

Vizcarra was then pulled out of the jungle slightly prematurely. "I was going to say, 'OK, go ahead' but as soon as they heard 'OK' they

A shocked Vizcarra is taken off his rescue helicopter onto the deck of USS Halsey, 6 November 1966. Vizcarra said that his "buggy eyes" were because "I got hit by salt spray as I jumped out onto the ship. I was totally shocked by being saved by the US Navy"



A USAF colonel greets Vizcarra after being transferred from USS Halsey to USS Constellation



Below: Vizcarra in the wardroom of USS Constellation with his rescuers and the captain of the ship. The gunpowder mark on Vizcarra's forehead is from a seatbelt explosive charge during his rescue.



started to pull me back up. I dropped the radio, which at least freed my hands so I could hang on for dear life, because I wasn't strapped in properly. The cable then draped over a branch and they used me as a battering ram to break it. On the fifth attempt they succeeded and I was finally free. When the helicopter landed on the ship it only had two minutes of fuel remaining."

The feeling of being rescued was a great relief: "Once I was on the helicopter I felt very good. I was on the ground for a little bit over two hours, and although it was only short it seemed like a long time." Vizcarra was flown to USS Halsey and "treated like royalty" before he was transferred to the USS Constellation and finally reunited with his squadron. For minor injuries he had received during the rescue Vizcarra was awarded the Purple Heart, although he recalled, "I did suffer bruises and scrapes on my arm, which drew blood, but I really didn't think I deserved it. It was a miracle I got rescued because I made lots of mistakes."

The cost of war

Vizcarra's ejection and rescue occurred towards the end of his time flying the F-105 and he recalled not being as enthusiastic to fly afterwards: "You're not so anxious to get back in a plane the minute you have to bail out over enemy territory." Although there was an unwritten policy that rescued pilots were sent home, Vizcarra's experience was valued, and he had to remain on active duty. After another near-accident Vizcarra was feeling edgy: "I was shook up and told [my superior officer], 'Sir, this is my third miss in a row and I think the good Lord is trying to tell me something.'"

397 F-105s were shot down during the Vietnam War between 1965-72, and in Vizcarra's wing dozens of pilots had been shot down by mid-1967. Many were rescued, but

"THE CABLE THEN DRAPED OVER A BRANCH AND THEY USED ME AS A BATTERING RAM TO BREAK IT. ON THE FIFTH ATTEMPT THEY SUCCEEDED AND I WAS FINALLY FREE"

a significant number were killed or captured. Vizcarra was eventually sent to Bangkok, but while he was there his flight commander Major Art Mearns was killed in action. "He was a good guy. I liked him and flew most of my missions with him, so that hit me hard. I felt guilty that I was in Bangkok instead of flying with him, and that's what keeps coming back. I don't think I could have saved him, but I did feel terrible that I was not with him on that mission." Vizcarra flew his last Thud mission shortly afterwards on 19 November 1966.

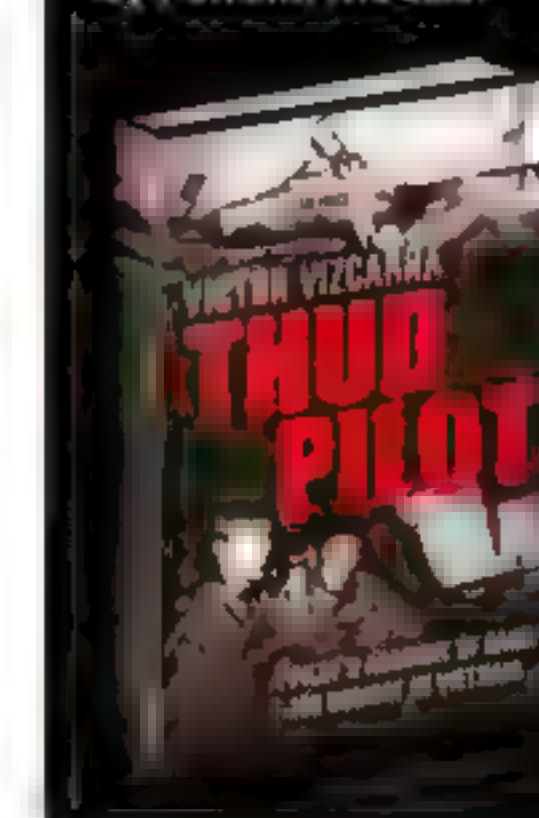
As for enemy casualties, Vizcarra explained that he had different views from some of his fellow pilots: "I didn't care for a few of the pilots' attitudes. Their attitude was that anybody in North Vietnam was an enemy, but I didn't see it that way. I had no qualms about killing the military because that's the enemy and that sort of thinking made it easy for me to bomb targets over North Vietnam. But civilians are civilians, and I didn't want to kill them."

The Vietnam War, then and now, has always been a deeply controversial conflict, and Vizcarra, who later retired as a colonel, felt that American politicians should bear the responsibility for the US defeat. "Unfortunately there was too much politics involved in the war.

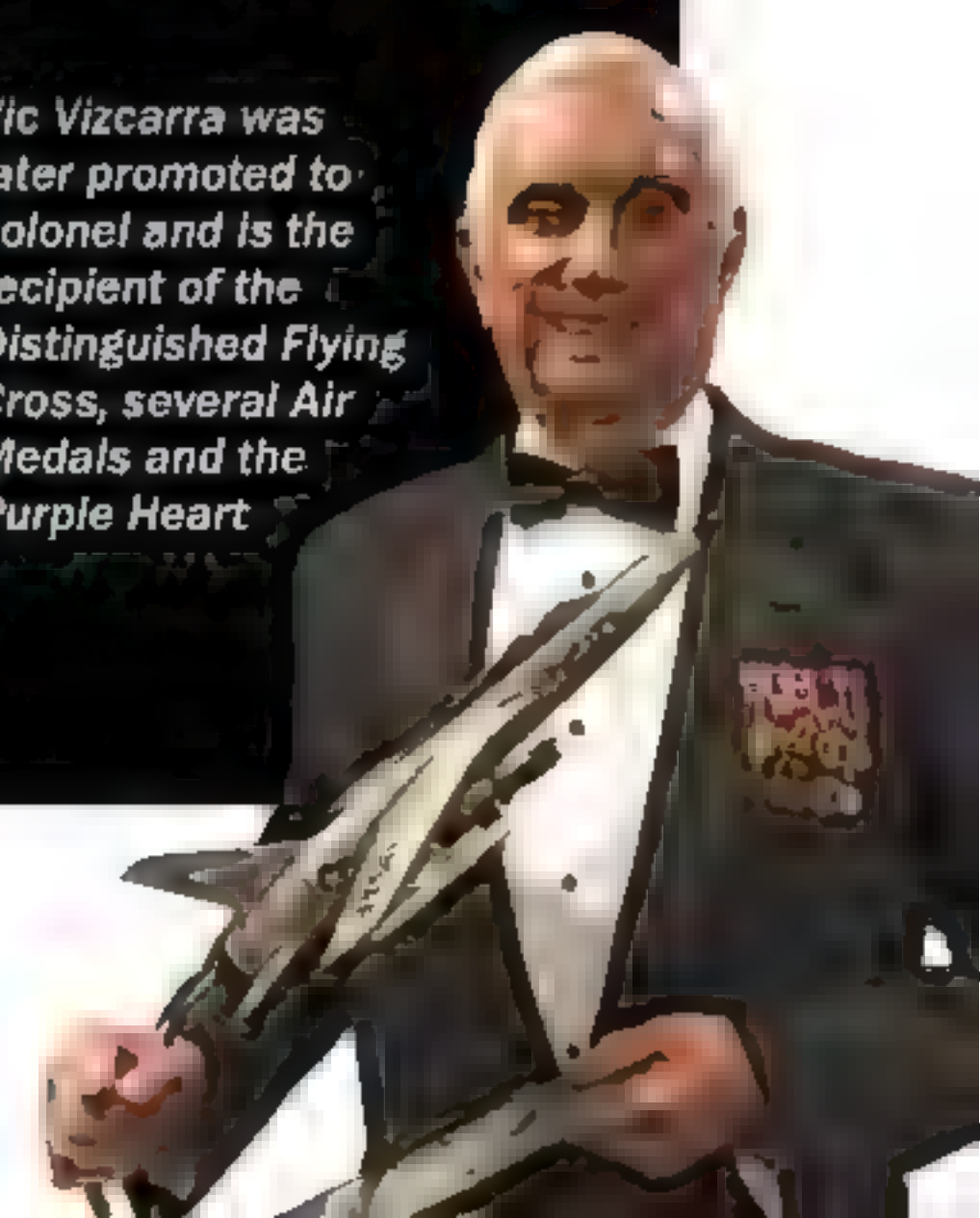
My philosophy is that if a nation needs to go to war the politicians should tell the military what the objective is but then let them use military strategy to achieve the objective. But unfortunately the United States has got too involved in too many wars since World War II where the politicians run the war rather than the military."

Since the war ended, Vizcarra has thought about the consequences of the conflict and concluded that those who died should be honoured. "I went through a period where it kind of oppressed me because people had been lost unnecessarily. I started questioning in my mind, 'Was it all worth it?' I almost came to the conclusion that it wasn't, but what changed my mind was when I thought it would be a disservice to those that made the ultimate sacrifice. If it wasn't worth it, how can you say this to people who went there and did what their country asked them to do, even in adverse circumstances? Time changes your feelings somewhat, but as a combat pilot I mostly remember the good."

Vic Vizcarra is the author of *Thud Pilot: A Pilot's Account Of Early F-105 Combat In Vietnam*, published by Fonthill Media.



Vic Vizcarra was later promoted to colonel and is the recipient of the Distinguished Flying Cross, several Air Medals and the Purple Heart



Great Battles

IA DRANG

The US First Air Cavalry sought to oust the North Vietnamese from the Central Highlands of South Vietnam – what followed was a bloody battle that pitted elite infantry forces against each other

WORDS WILLIAM E. WELSH

**“MORE COMMUNISTS CLAD
IN MUSTARD-COLOURED
UNIFORMS ARRIVED TO JOIN
THE FIREFIGHT”**



US Army Major Bruce Crandall, who received the Medal of Honor for bravery during the battle, departs in his UH-1D helicopter after dropping off a load of riflemen at LZ X-Ray



PLEIKU PROVINCE, SOUTH VIETNAM 14-17 NOVEMBER 1965

Less than two hours after landing near the Cambodian border on 14 November 1965, an American 'Air Cavalry' battalion made contact with North Vietnamese regulars operating from a base camp in a mountain stronghold inside South Vietnam. In a sweep up a nearby mountain, an American rifle platoon spotted a squad of enemy troops that appeared to be retreating along a mountain trail and gave chase. The jungle swallowed the Americans, and they lost contact with their main force.

50 North Vietnamese came charging down the trail towards the US troops. Rounds hissed through the trees. Two American machine gun teams swung into action, and a grenadier pumped rounds from his M79 'Thumper' into the enemy's flank. More Communists clad in mustard-coloured uniforms arrived to join the firefight.

The young lieutenant leading the American platoon had committed the blunder that he had been warned minutes before not to commit. His company commander over the tactical radio had said: "Be careful, I don't want you to get pinned down or sucked into anything." In his desire to engage the enemy, the eager young officer had done precisely that. His platoon would have to hold on until help came – if it arrived before they were wiped out.

The war between the communist Democratic Republic of Vietnam and the American-backed Republic of Vietnam, better known as North Vietnam and South Vietnam respectively, entered a new phase in 1965. Four years earlier, the US had 'stood up' its Military Assistance Command, Vietnam. Among MACV's many responsibilities was ensuring that the South Vietnamese troops had American military advisors to coach them on battle tactics.

When it became apparent that South Vietnamese forces could not defeat the Viet Cong insurgency, the Americans brought in their own ground troops. At the same time, the North Vietnamese Politburo had decided to send regular army troops into action in South Vietnam. These troops arrived in the south by

OPPOSING FORCES

	VS	
PEOPLE'S ARMY OF NORTH VIETNAM		US ARMY
UNIT: B-3 Front		UNIT: First Cavalry Division (Airmobile)
LEADERS: Brig. Gen. Chu Huy Man		LEADERS: Lt. Col. Harold Moore
INFANTRY: 6,000		INFANTRY: 1,500
HEAVY ARTILLERY: 0		HEAVY ARTILLERY: 12 105mm howitzers

way of the Ho Chi Minh Trail, a vast road and trail network built by labourers from the north that ran through eastern Laos and Cambodia.

Among the elite US ground forces that arrived in 1965 was Major General Harry Kinnard's 16,000-strong First Cavalry (Airmobile) Division, which established its base at An Khe in Binh Dinh Province. The division was built around the novel concept of moving troops before and during battle by helicopter.

The helicopter that was the mainstay of the air mobility concept was the ubiquitous utility helicopter, the UH-1, nicknamed 'Huey'. At this point in the Vietnam War it came in two versions: the elongated UH-1D, known as a 'Slick' transported troops, and the shorter UH-1B armed with rocket launchers and miniguns was known as a 'Hog'. Slicks ordinarily could carry their four-man crew as well as eight infantrymen, but the thin air of the highlands strained the engine, and in that altitude it could transport only five infantrymen.

After its arrival in September, the division conducted sweeps around its sprawling helicopter base at An Khe to clear the area of Viet Cong guerillas. Far bigger opportunities awaited it, though. When the North Vietnamese attacked the US Special Forces camp at Plei Me in the Central Highlands on 19 October, MACV Commander General William Westmoreland ordered Kinnard to engage and destroy enemy forces. At first the Americans believed they were fighting the Viet Cong but eventually realised they were up against well-trained, highly disciplined North Vietnamese regulars.

The Central Highlands had long been a sanctuary for communist operations in South Vietnam. The highlands "are a run of erratic

"AT FIRST THE AMERICANS BELIEVED THEY WERE FIGHTING THE VIET CONG BUT EVENTUALLY REALISED THEY WERE UP AGAINST WELL-TRAINED, HIGHLY DISCIPLINED NORTH VIETNAMESE REGULARS"

mountain ranges, gnarled valleys, jungle-strewn ravines and abrupt plains where Montagnard villages cluster, thin and disappear as the terrain steepens," wrote war correspondent Michael Herr. As such, they offered the North Vietnamese both a training ground and a sanctuary to recover from battle. For the American troops, who had little knowledge of the rugged high country and would have had great difficulty penetrating it without their helicopters, the highlands were "spooky beyond belief," said Herr.

Running the show for the communist People's Army of Vietnam in the Central Highlands in 1965 was Brigadier General Chu Huy Man, the commander of the division-sized B-3 Front. His three regiments were the 32nd, 33rd and 66th regiments. Hanoi wanted Man to destroy the Plei Me Special Forces Camp and any South Vietnamese forces sent to support it. Afterwards, his troops were to advance east to the coast, thereby splitting South Vietnam in half. But when Hanoi learned

that the newly arrived First Cavalry Division (Airmobile) stationed at An Khe blocked a drive to the coast, it revised the final step. The North Vietnamese regulars were not to try to reach the coast: instead, they were to kill Americans.

American air power broke attempts by the 32nd and 33rd regiments to capture the Special Forces Camp and to destroy the South Vietnamese relief force. After a severe mauling, Brigadier General Man withdrew his forces west into the Ia Drang Valley, which bordered the Chu Pong Mountains.

Kinnard sent his reconnaissance force, the First Squadron of the Ninth Cavalry, to scour the Ia Drang Valley in search of the enemy base camp. The Ninth Cavalry used light observation helicopters with large Plexiglas bubble canopies to peer into the foliage below for signs of the enemy. When they spied something promising, an aero-rifle platoon was deployed to explore the situation on foot. During the first week of November, the squadron found evidence indicating that the Communists' base camp was situated on or near the Chu Pong mountains. Their reconnaissance was accurate, because the three North Vietnamese regiments were deployed on the eastern slopes of the mountains, as well as in Ia Drang Valley to the north east.

Anticipating a large battle, Kinnard ordered Colonel Thomas Brown to have his Third Brigade ready for a helicopter assault into Ia Drang Valley. The brigade comprised Lieutenant Colonel Harold Moore's First Battalion, Seventh Cavalry; Lieutenant Colonel Robert McDade's Second Battalion, Seventh Cavalry; and Lieutenant Colonel Robert Tully's Second Brigade, Fifth Cavalry.

North Vietnamese soldiers fighting to liberate South Vietnam underwent rigorous training in battlefield tactics



10 B-52 STRIKES

On the afternoon of the third day US B-52 bombers from Guam conduct bombing runs against North Vietnamese forces in the Chu Pong Mountains. The tactical B-52 strikes mark the beginning of Operation Arc Light. The Arc Light attacks against the Chu Pong mountains continue for the next five days.

03 ISOLATED PLATOON

Elements of the 33rd and 66th regiments of the North Vietnamese B-3 Front stream downhill to attack Bravo Company. They encircle Bravo Company's Second Platoon. In the process of forming a defensive position, the platoon loses one of its two invaluable M60 machine guns.

04 FAILED RELIEF ATTEMPT

By late afternoon all four companies of the First Battalion, Seventh Cavalry have arrived at LZ X-Ray. An attempt to rescue the isolated platoon on the mountainside fails in the face of strong enemy resistance.

08 SUCCESSFUL RESCUE MISSION

Two fresh battalions arrive by midday. With his strength tripled, US Army Lt. Col. Harold Moore has enough men to hold the landing zone and also rescue the isolated platoon. A relief force rescues the encircled American platoon on the afternoon of 15 November. Of the 29 men from the platoon, only seven avoided serious injury. Nine died and 13 were wounded.

02 PRISONER CAPTURED

In their initial sweep around the perimeter, US riflemen find a lone enemy deserter without a weapon. Through an interpreter, he tells the Americans that there are two North Vietnamese battalions in the hills above the landing zone. The Communist soldiers are eager to kill Americans, he says.

01 FIRE CONTROL HELICOPTER

A command and control helicopter flying above the landing zone co-ordinates supporting fire for First Battalion, Seventh Cavalry. Supporting fire consists of two batteries of 105mm howitzers located at LZ Falcon, as well as helicopter gunships and strike aircraft.

07 FRIENDLY FIRE CASUALTIES

Two US F-100 Super Sabres unload canisters of napalm on what they believe is an enemy position at 8.30am. The pilot in the lead jet releases his two canisters and they explode inside the perimeter near Moore's command post. Two American soldiers are severely burned in the explosion. The second pilot narrowly avoids making the same mistake.

09 FINAL ASSAULT

The Americans string flare traps on the second night to alert them to a night-time attack. The North Vietnamese attack before dawn on 16 November, setting off the trip wires, thus giving the Americans warning that an attack is in progress. After attempting four times in the early morning to breach the south side of the perimeter, the North Vietnamese break contact for the final time.

05 ATTACK ON THE LANDING ZONE


Two companies of North Vietnamese attack the landing zone from the south in an attempt to penetrate the perimeter. Charlie Company holds its ground, and this makes it possible for the helicopters to continue landing more troops and ammunition throughout the afternoon. By late afternoon, all four of Moore's companies have safely arrived in the landing zone.

06 ENTRENCHED FOE

By the morning of 15 November many of the Communist soldiers are entrenched outside of LZ X-Ray in spider holes. These shoulder-deep, camouflaged positions offer protection against artillery barrages, bombs and rockets, with which the Americans hammer the enemy positions.



"CHARLIE COMPANY HOLDS ITS GROUND, AND THIS MAKES IT POSSIBLE FOR THE HELICOPTERS TO CONTINUE LANDING MORE TROOPS AND AMMUNITION"



A weary sergeant of Alpha Company First Battalion, Seventh Cavalry has the '1,000-yard stare' characteristic of soldiers who have seen protracted fighting

"THEY WERE DAMNED GOOD SOLDIERS, USED COVER AND CONCEALMENT TO PERFECTION AND WERE DEADLY SHOTS"

Kinnard selected Moore's battalion to spearhead the assault scheduled for 14 November. Moore was the best choice for the mission because he had extensive combat experience from the Korean War. Based on the earlier findings, Kinnard decided to land Moore's battalion at the north-eastern base of the Chu Pongs on the assumption that he would be landing behind the North Vietnamese, and therefore could cut off their retreat. As subsequent events would prove, Moore landed among the enemy, not behind it.

The cavalry arrives

LZ X-Ray was a narrow, 30-metre-long (100-feet) clearing with chest-high, yellow-brown elephant grass, scattered trees and massive termite mounds. The open woodlands at the base of the mountains gave way to thick jungle as soon as they began ascending the steep slopes.

Moore had 16 Huey Slicks to ferry his troops to LZ X-Ray. The clearing could only accommodate eight Slicks at a time, so the other eight would have to hover nearby until the first group had exited the landing zone. The helicopter pilots would have to make half a dozen 'lifts' to get the 440 men on the ground, a process that would take most of the first day.

Each US Army rifleman carried 300 rounds of ammunition for his newly issued M16 assault rifle, and each M79 grenadier had 36 rounds. Each rifle platoon had two M60 machine guns, each of which had at least four boxes of ammunition. In addition, each squad had two portable anti-tank weapon rockets to destroy enemy bunkers.

Moore's men assembled late in the morning near Plei Me for the shuttle to LZ X-Ray. The

first lift carried Moore and Bravo Company. The 22.5-kilometre (14-mile) flight from Plei Me to LZ X-Ray took 13 minutes. At 10.35am the choppers rose skyward in a swirl of red dust. A few minutes out the pilots took their 'birds' down to treetop level for the final approach. It was dry season in the mountains, and the streams that snaked across the plateaus were bone dry. The landing zone was veiled in grey smoke from artillery shells and aerial rocket artillery designed to kill any enemy soldiers in or near the clearing. The barrage stopped just seconds before the Slicks of the first lift flew down into the clearing.

Moore and his staff set up their command post next to a large termite mound. Dry ravines bracketed the clearing on the west and north. Shortly after noon the second and third lifts delivered more soldiers. To ensure that the helicopters could continue to land safely through the afternoon, Moore wanted to engage the enemy outside of the landing zone, not in it. Leaving Alpha Company to guard the landing zone, Moore ordered Captain John Herrin to explore the lower slope of the 457-metre (1,500-foot) mountain to the north west that loomed over the landing zone.

The North Vietnamese were waiting for the Americans. The communist soldiers, who were drawn mainly from the rural peasantry, were patient, tenacious and tough. Each carried a Soviet-designed AK-47 rifle and three 'potato masher' grenades. Their platoons had machine guns and hand-held rocket-propelled grenade launchers.

Their tactical doctrine called for inflicting heavy casualties on the Americans at the beginning of a battle and then breaking contact before they could be taken under fire by enemy

long-range artillery or air strikes. If they had to fight a sustained battle, they fought from concealed positions close to the enemy so that the Americans would be reluctant to call in supporting fire for fear of causing friendly casualties. This tactic was known as "clinging to the belt".

Captain John Herren's Bravo Company ascended the mountain with two platoons abreast and one behind. Al Devney's First Platoon held the left, Lieutenant Henry Herrick's Second Platoon held the right, and Lieutenant Dennis Deal's Third Platoon brought up the rear. Alerted by a mountaintop observation post that the Americans had landed, the North Vietnamese streamed down the mountain in large numbers.

Bravo Company ran headlong into large numbers of enemy troops just 30 minutes after it had left the landing zone. The communists quickly pinned down Devney's men, yet the savvy platoon leader maintained contact with the landing zone.

"They were damned good soldiers, used cover and concealment to perfection and were deadly shots," Moore said of the enemy. As soon as the firefight commenced, devastating American firepower struck the mountainside. In addition to the torrent of howitzer shells that screamed down on them, the North Vietnamese troops were pounded throughout the long afternoon with rockets, bombs and napalm.

To counter the American strike aircraft, the North Vietnamese on the mountain fired 12.7mm Russian-made heavy machine guns that they used as anti-aircraft weapons. In mid-afternoon they finally succeeded in downing an A1-E Skyraider that crashed in a fireball north of LZ X-Ray.

"THE NORTH VIETNAMESE WERE WAITING FOR THE AMERICANS. THE COMMUNIST SOLDIERS, WHO WERE DRAWN MAINLY FROM THE RURAL PEASANTRY, WERE PATIENT, TENACIOUS AND TOUGH"

A soldier rushes to retrieve an American body at LZ X-Ray as a waiting helicopter prepares to take off under heavy fire





An air cavalry platoon sweeps through the elephant grass firing M16 rifles during heavy fighting at LZ X-Ray

The communist soldiers quickly got behind Herrick's platoon, and it lost contact with the rest of Bravo Company. Engaged in a full-throttle firefight, Herrick's three squads pulled back shortly before mid-afternoon to a knoll on a ridge to await rescue. Their perimeter was only 23 metres (75 feet) in diameter.

A torrent of small arms fire swept the knoll where Herrick's men lay prone. If they knelt, they were struck by AK-47 or automatic weapons rounds. The Americans laid their M16s flat and fired on full automatic. While establishing an effective defence on the knoll, Herrick was killed by an enemy round. Command eventually devolved, after two sergeants were killed in quick succession, to a third sergeant named Clyde Savage. In an effort to keep the enemy at bay, Savage called in air support and artillery fire that landed within 46 metres (150 feet) of the platoon's position to keep the enemy back.

"The bullets were clipping all around us, hitting men and trees and cutting the grass," said Savage. "There was a lot of fire coming in on us and they had people coming up at us, but they had a hell of a lot of fire coming down on them."

While the fighting on the mountainside raged, the Huey Slicks continued to arrive with additional platoons. Moore sent Captain 'Tony' Nadal with his Alpha Platoon troops to extend the battlefield on the mountain. They took up a position on the left flank of Bravo Company. In so doing, they blocked the Communists from striking the landing zone directly from the mountain.

Moore retained Captain Bob Edwards's Charlie Company at the landing zone as a reserve. Charlie Company deployed on the south side of the perimeter to prevent the enemy from hooking around the Americans to the south and overrunning the landing zone.

Moore told his immediate superior, Third Brigade Commander Colonel Tim Brown, that he was hard-pressed by the enemy and could use another company of soldiers. Realising the dire nature of the situation, Brown mustered far more reinforcements than Moore requested. But it would take time to get many of them to the battlefield.

While arranging for two full battalions to arrive the following day, Brown gathered the closest reinforcements available to send that afternoon. Captain Myron Diduryk's Bravo Company of Second Battalion, Seventh Cavalry was guarding Brown's headquarters south of Pleiku. Brown ordered Diduryk to prepare his men to fly via helicopter to LZ X-Ray.

Scheduled to arrive the next day on Brown's orders were Lieutenant Colonel McDade's battalion and Lieutenant Colonel Robert Tully's battalion. They would be moved later in the day to landing zones within several miles of LZ X-Ray. While McDade's men would be lifted by helicopter to LZ X-Ray on the morning of the second day, Tully and his men would have to march overland to LZ X-Ray through enemy-controlled territory, where an ambush was a real possibility.

By mid-afternoon the North Vietnamese had begun attacking the landing zone in large numbers. The small clearing was swept by a hailstorm of small arms and automatic weapons fire. North Vietnamese mortar rounds and rocket-propelled grenades exploded inside the perimeter, which forced Moore to suspend helicopter landings for a short time. The last lifts of the day brought in Captain Louis Lefebvre's D Company, which was Moore's heavy weapons company, and Diduryk's rifle company. This gave Moore enough troops to adequately defend his entire perimeter.

The enemy made four unsuccessful attempts to penetrate the perimeter that night. On the mountainside, the encircled platoon benefitted from the support of an AC-47 'Spooky' gunship that circled overhead firing its miniguns outside the platoon's tiny perimeter.

At dawn on 15 November, the second day of battle, a squad patrolling the bush south of the perimeter triggered a premature assault by a company-sized force of North Vietnamese troops. A furious firefight ensued in which Charlie Company was hard-pressed to hold its position.

Although he was wounded in the firefight, Charlie Company commander Captain Edwards continued to direct the defence of his section of the perimeter. He pleaded with Moore for reinforcements, but the battalion commander refused. When the situation became even more dire, Moore sent his last reserve, the battalion's reconnaissance platoon, to assist Charlie Company. Hand-to-hand fighting occurred, and the dead of both sides lay alongside each other in the elephant grass.

The North Vietnamese expanded their assault on LZ X-Ray by assailing the north and east sides of the perimeter too. Moore called Brown again by radio, urgently inquiring as to the status of the promised reinforcements. Brown said that Tully's battalion was on its way to join Moore.

Moore ordered each company to pop coloured smoke grenades just outside their position to mark it for the ground-attack aircraft and rocket-firing helicopters. Soon the area outside of the perimeter was rocked by a series of explosions as rockets, high-explosive bombs and napalm fell on communist positions. The air strikes eventually forced the North Vietnamese to break off their attack. The three-hour fight took a heavy toll on Charlie Company, which lost half of its strength in the fight. Shortly afterwards, Colonel

"THE AMERICAN CASUALTIES AT LZ X-RAY AMOUNTED TO 79 KILLED AND 121 WOUNDED. THE AMERICANS CONFIRMED THAT THEY HAD KILLED 650 NORTH VIETNAMESE"

Lt. Col. Harold Moore examines a fallen North Vietnamese regular after the Battle of Ia Drang.

Members of the US 1st Air Cavalry march through forest en route to Chu Phong mountain, in the Ia Drang Valley.

Brown made a brief visit to the landing zone to inform Moore that he would be withdrawing his force the following day.

Additional elements of McDade's Second Battalion, Seventh Cavalry arrived in the morning by helicopter, and Tully's battalion arrived safely at noon following a dangerous march through enemy-controlled territory. To avoid an enemy ambush, Tully had spread out his battalion rather than have it march in a single, vulnerable column.

The arrival of a large number of fresh troops put Moore's mind at ease. He dispatched three companies to rescue the isolated battalion. This time the communists did not contest their advance. The relief force entered the jungle shortly after 1.00pm, and helicopter gunships peppered the area over which they would be advancing with rocket fire.

Two hours after the relief force set out, it returned to the landing zone escorting the seven uninjured soldiers and carrying the wounded in ponchos. They also brought back their fallen comrades. The survivors were caked in blood and dirt. They had the vacant '1,000-yard stare' of battle-weary troops who had narrowly avoided being wiped out by a more numerous enemy. The North Vietnamese troops

made no further attacks that day on the landing zone. Their chance to wipe out Moore's battalion had come and gone.

Helicopters evacuated Moore's troops on 16 November to Pleiku for rest and recovery. The other two battalions of the Third Brigade remained at LZ X-Ray that night. Both battalions departed on foot the morning of 17 November. The two battalions marched together but eventually split up to head for different landing zones. Tully's battalion continued on a north east course for LZ Columbus, while McDade's battalion turned west towards LZ Albany. McDade had not taken any steps to protect his flanks, either by detaching small groups of soldiers to thrash through the brush alongside the trail or by walking barrages of artillery. His battalion would pay a heavy price for his negligence.

Brigadier General Man thirsted for revenge for the heavy casualties his force suffered at LZ X-Ray. He ordered two battalions to set up a classic L-shaped ambush that would enable the communists to rake the column with small arms, automatic weapons, rocket-propelled grenades and mortars. They waited quietly in the elephant grass until the Americans were deep into the trap. Just as the front of McDade's column was entering the clearing at Albany, the North Vietnamese attacked. American airpower arrived eventually to drive off the enemy, but the battalion was destroyed as a fighting force.

The American casualties at LZ X-ray amounted to 79 killed and 121 wounded. The Americans confirmed that they had killed 650 North Vietnamese and estimated that the Communist soldiers took with them approximately 1,000 of their slain comrades when they withdrew from the battlefield.

As for the debacle at LZ Albany, the Americans suffered 151 dead and 121 wounded. They estimated that the North Vietnamese lost 1,500 men as a result of US artillery barrages and airstrikes at Albany.

Although the three-day battle at LZ X-Ray is best described as a tactical draw, the Americans won a strategic victory in the larger Pleiku campaign, as they had prevented the North Vietnamese from splitting South Vietnam in two with a drive to the coast of the South China Sea. Man did his troops a great disservice at Ia Drang by not having large numbers of heavy weapons, particularly large anti-aircraft guns, to offset the American airpower. Many of these were left behind on the Ho Chi Minh Trail as the infantry hurried forward to the battlefield in the highlands.

The Battle of Ia Drang "marked the first wholesale appearance of North Vietnamese regulars in the South," wrote Herr. "And no one who was around then can forget the horror of it or... get over the confidence and sophistication with which entire [North Vietnamese] battalions came to engage America in a war."

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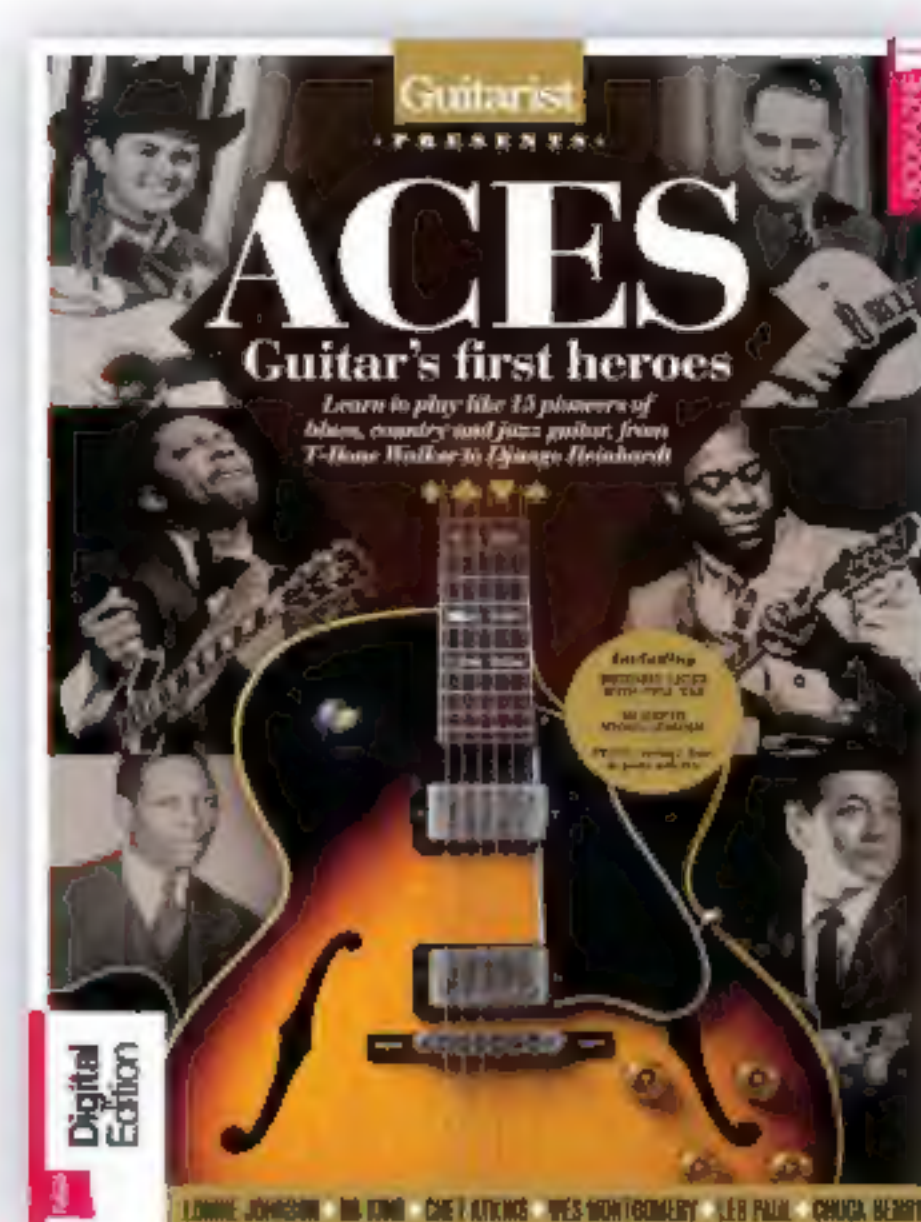
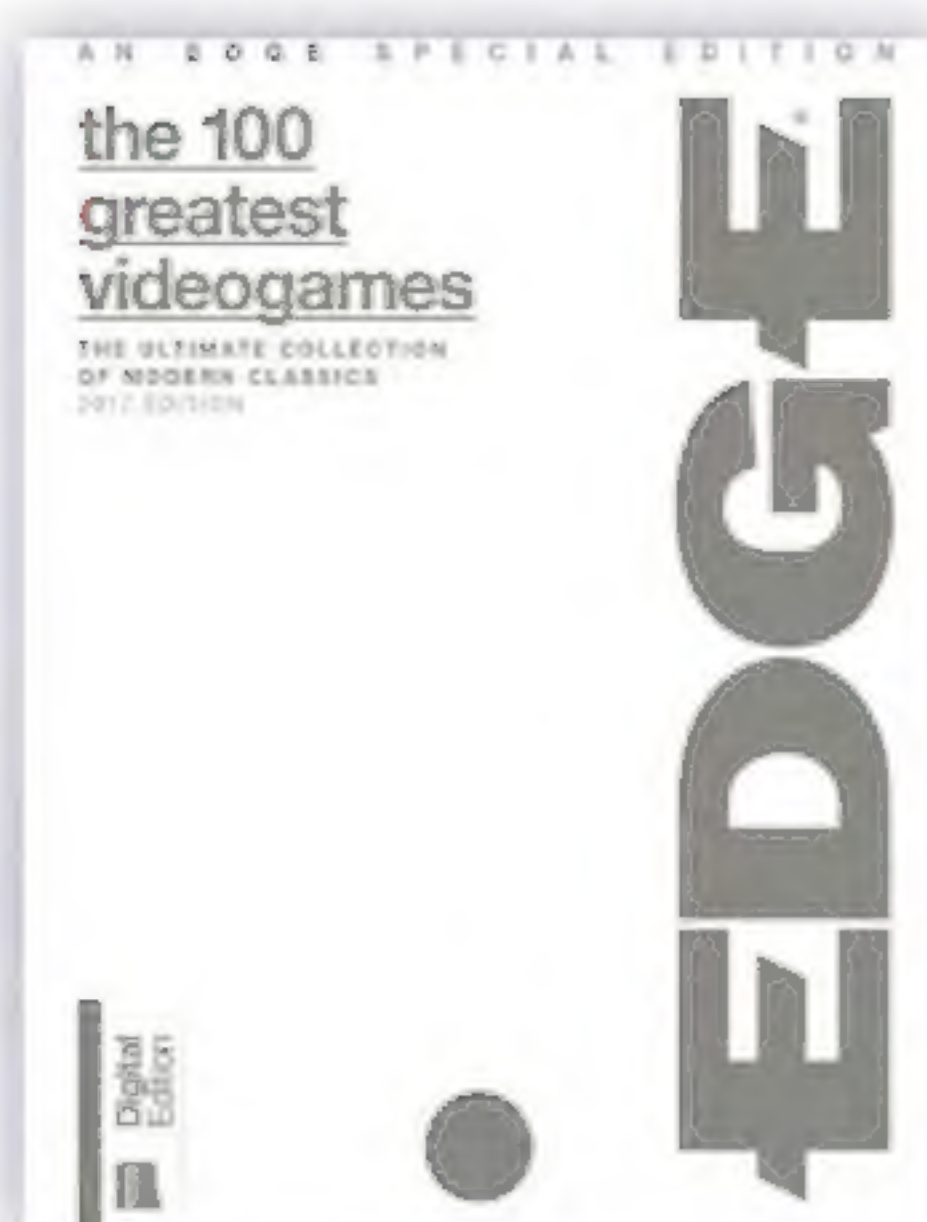


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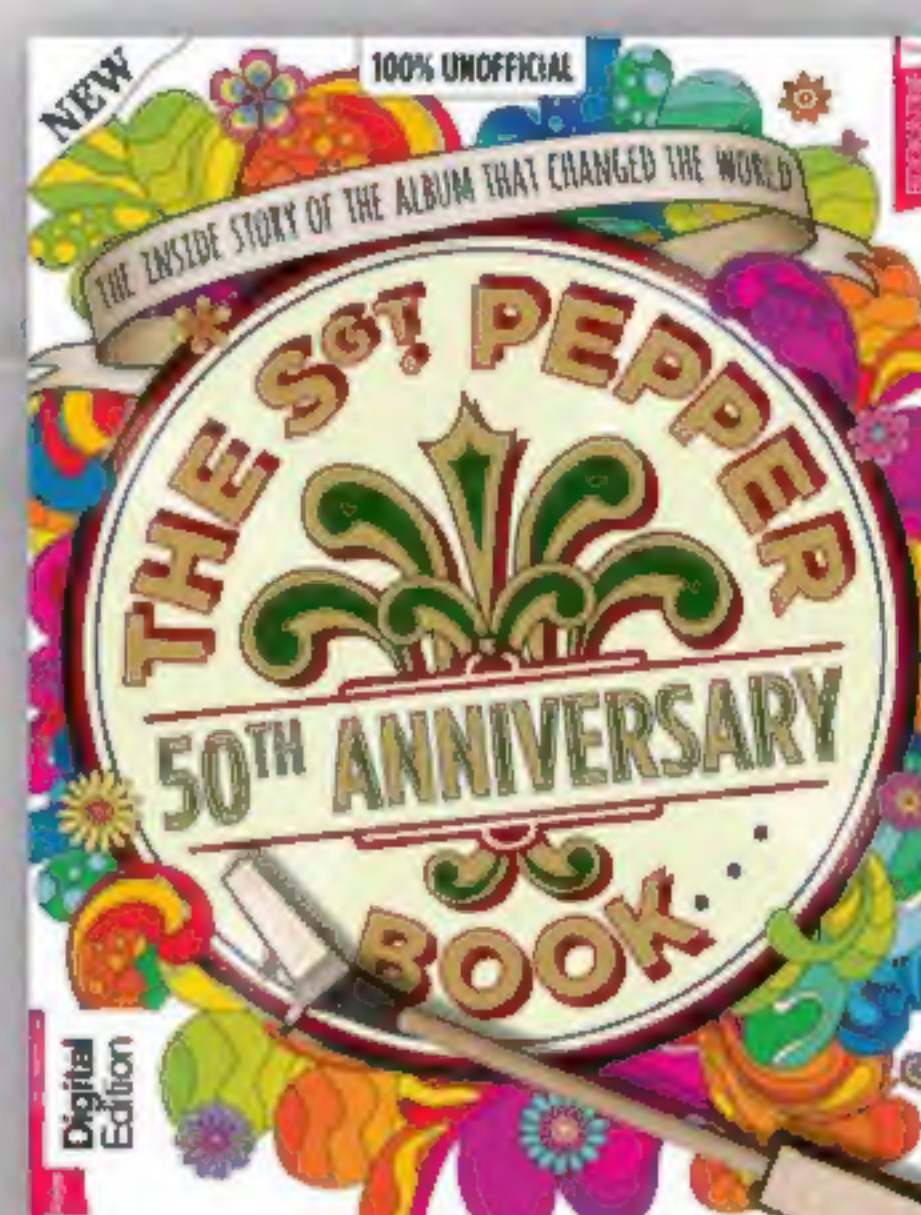
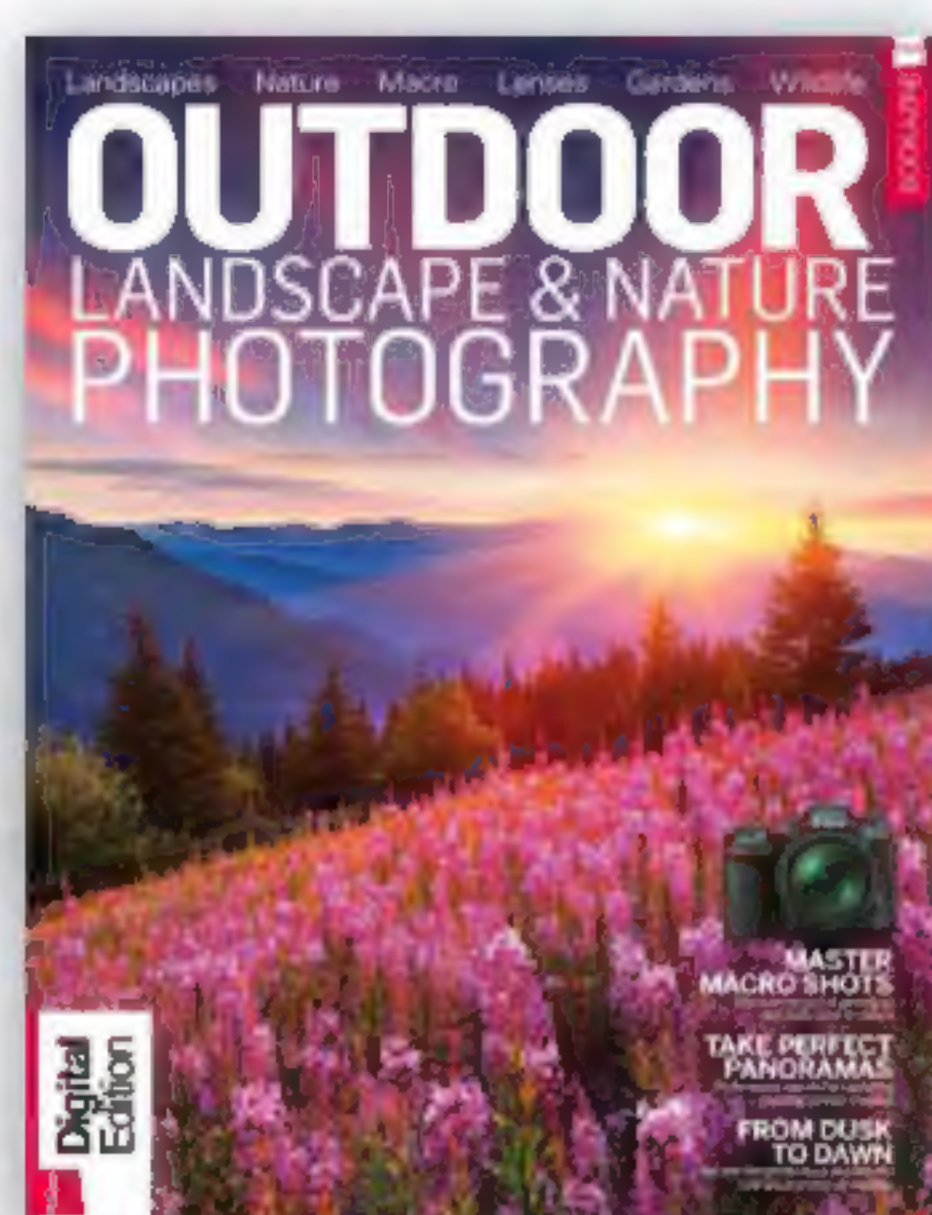


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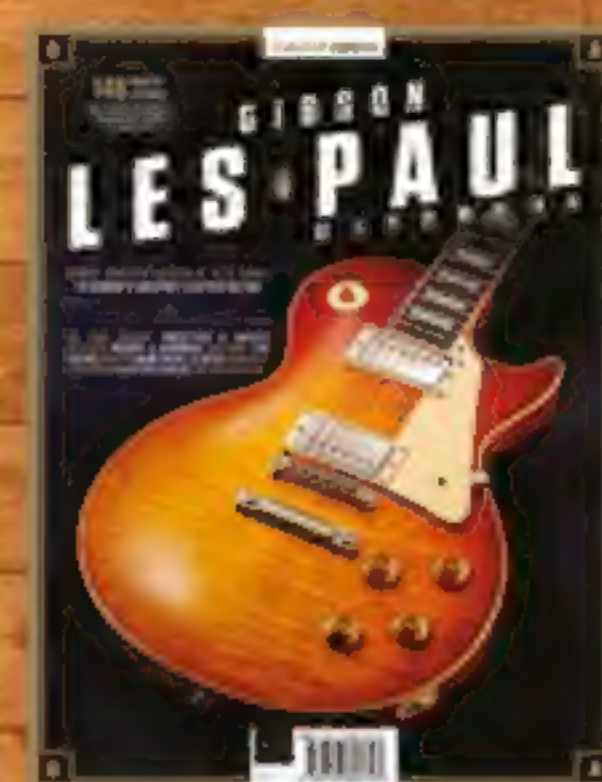
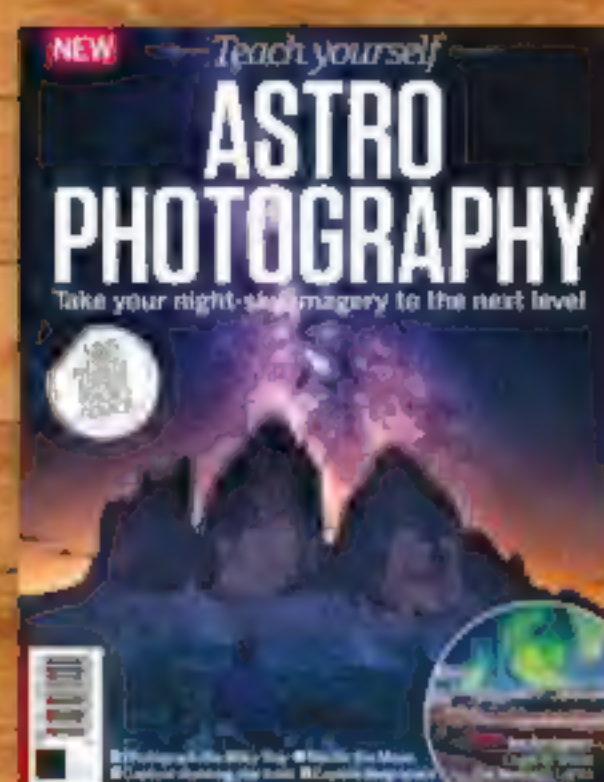
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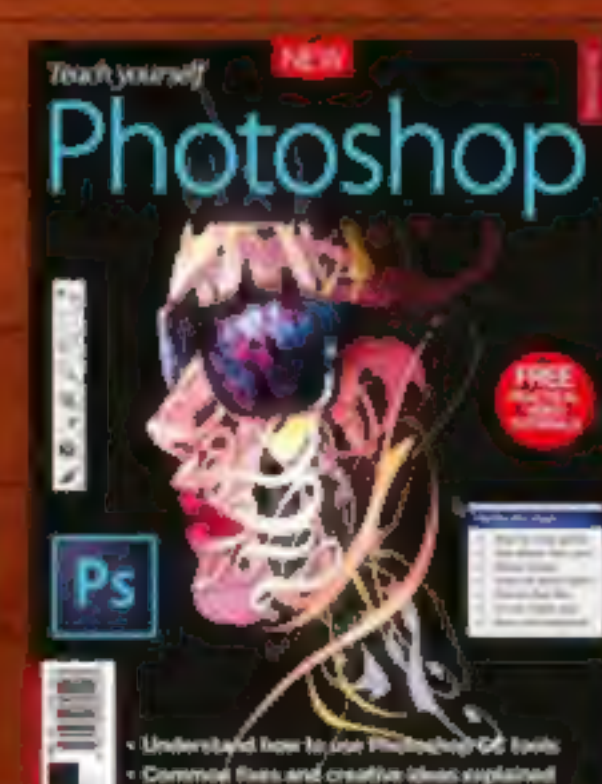
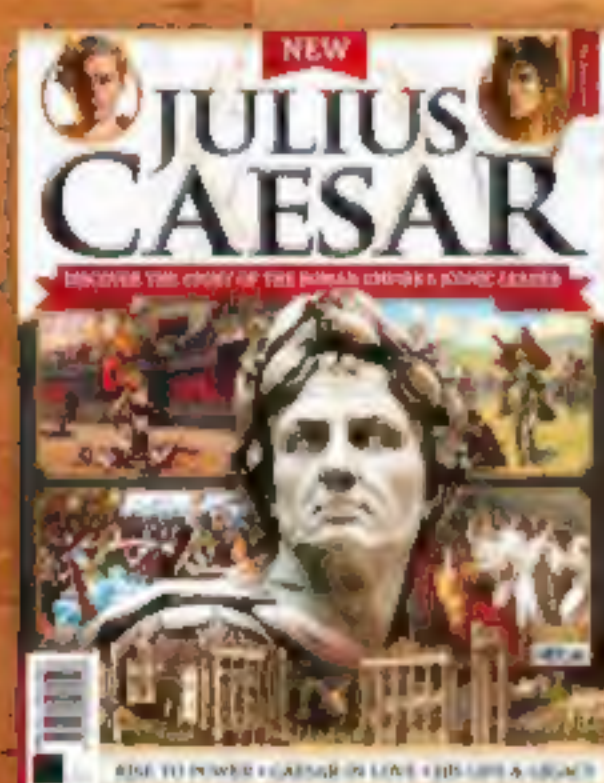
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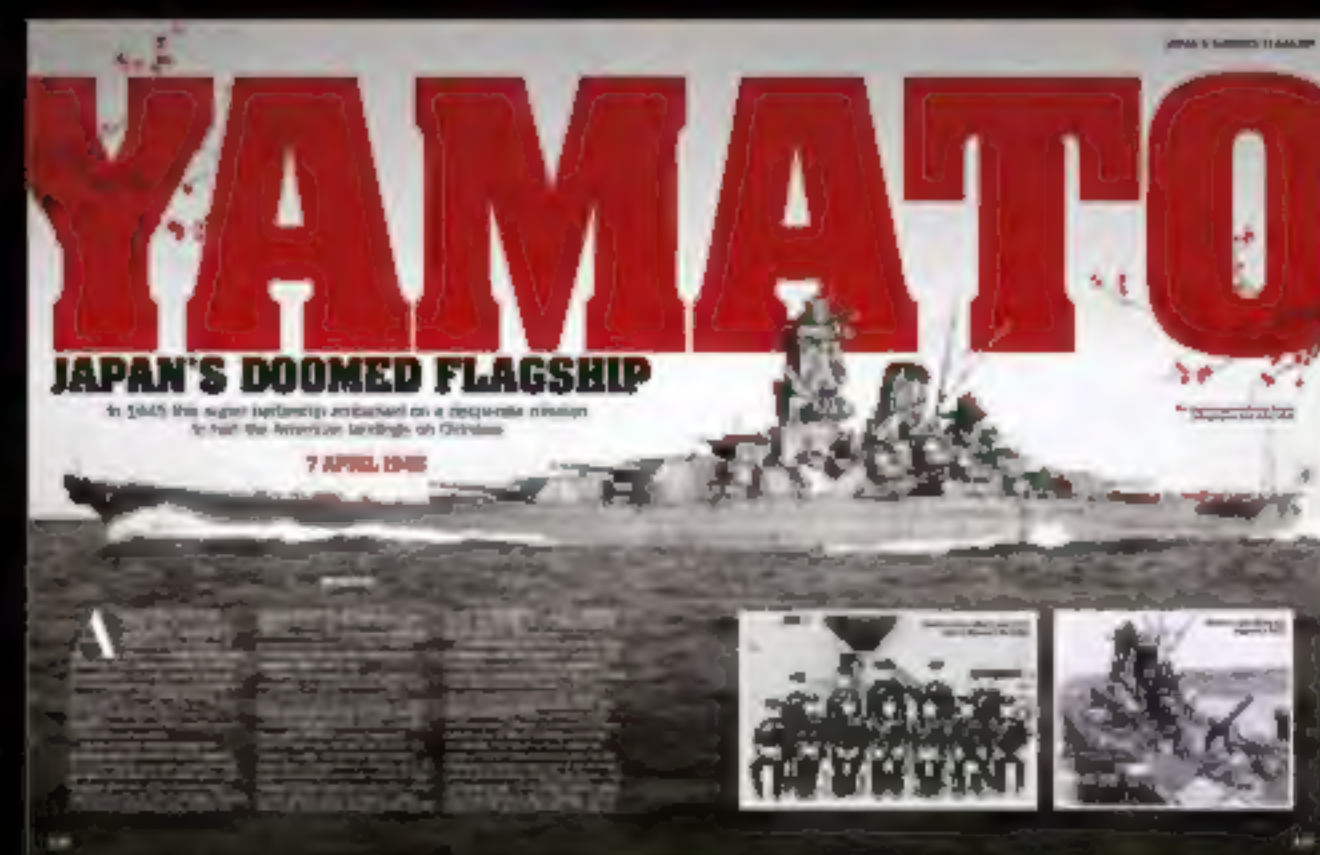
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